

THE VASCULAR FLORA OF AMITE COUNTY, MISSISSIPPI

Mac H. Alford¹

*Department of Botany
Duke University
Box 90338
Durham, NC 27708-0338, U.S.A.
mha8@cornell.edu*

ABSTRACT

A survey to document the vascular plants of Amite County, Mississippi, was conducted from 1997 to 2000. Occupying 732 square miles, the county lies along an edaphic and physiographic transition zone from loess in the west to sandy loam and gravel in the east. Species composition changes with the gradient, and the county serves as a westernmost limit to several southeastern plants (e.g., *Gelsemium rankinii* Small, *Illicium floridanum* J.Ellis). Amite County also harbors a residual element of north-south Pleistocene migrations in the loess hills (e.g., *Adiantum pedatum* L., *Pachysandra procumbens* Michx., *Cynoglossum virginianum* L.). A total of 923 species were recorded, with new records for the state (*Solidago auriculata* Shuttlew. ex S.F.Blake, *Clinopodium gracile* (Benth.) Kuntze, *Alstroemeria psittacina* Lehm., *Ipomoea indica* (Burm.f.) Merr., *Photinia serratifolia* (Desf.) Kalkman) and a confirmation of recently published records of *Physalis carpenteri* Riddell and *Dryopteris ludoviciana* (Kunze) Small in Mississippi.

RÉSUMÉ

Un arpentage pour documenter les plantes vasculaires du Comté d'Amite, Mississippi, a été conduit de 1997 à 2000. Occupant 1874 kilomètres carrés, le comté s'étend le long d'une zone de transition édaphique et physiographique du loess à l'ouest au terreau sablonneux et au gravier à l'est. La composition d'espèces se modifie selon le gradient du terrain, et le comté sert de limite occidentale à plusieurs plantes du sud-est (e.g., *Gelsemium rankinii* Small, *Illicium floridanum* J.Ellis). Le Comté d'Amite contient aussi un élément résiduel des migrations pléistocènes nord-sud parmi les collines de loess (e.g., *Adiantum pedatum* L., *Pachysandra procumbens* Michx., *Cynoglossum virginianum* L.). Un total de 923 espèces est enregistré, avec de nouvelles documentations pour l'état (*Solidago auriculata* Shuttlew. ex S.F.Blake, *Clinopodium gracile* (Benth.) Kuntze, *Alstroemeria psittacina* Lehm., *Ipomoea indica* (Burm.f.) Merr., *Photinia serratifolia* (Desf.) Kalkman) et la confirmation des documentations récemment publiées de *Physalis carpenteri* Riddell et *Dryopteris ludoviciana* (Kunze) Small en Mississippi.

INTRODUCTION

Relative to most of the eastern United States, the vascular flora of Mississippi is poorly known (Duncan 1953; Pullen 1966; Bryson & Carter 1992; Bryson et al. 1996; Sorrie & Leonard 1999). This problem was remedied to some extent by the Flora of Mississippi project funded by the National Science Foundation and executed by Samuel B. Jones, Jr. (University of Southern Mississippi, later GA), Thomas M. Pullen (MISS), and Ray Watson (MISSA). Despite a number of vital

¹Present address: L.H. Bailey Hortorium, Cornell University, 462 Mann Library, Ithaca, New York 14853 U.S.A., mha8@cornell.edu.

publications (e.g., Evans 1978; Jones 1974a, 1974b, 1975, 1976; Pullen 1966; Pullen et al. 1968; Temple & Pullen 1968), however, the project was never completed and has only recently been reinvigorated (e.g., Bryson & Carter 1992).

One of the major components of a statewide flora is information assembled from smaller-scale floras and the herbarium specimens they yield. Most of Mississippi's vascular floristic work has been concentrated in the northeast and southeast, near the major universities and in the longleaf pine belt, respectively. In fact, of all Mississippi vascular floras, only one (McCook 1982) is a survey in the southwestern part of the state. The adjacent area to the south in the Florida parishes of Louisiana can claim a much better record, but surprisingly the first flora of that region was not completed until 1972 (Allen 1972).

The area chosen for this floristic study is Amite County, Mississippi. This choice is significant, considering the following reasons. First, Amite County is one of the counties that borders Louisiana in the southwest and as such is likely to produce new records merely by its periphery for the state of Mississippi. Second, Amite County occupies an interesting edaphic and physiographic location, serving as the transition zone from heavy loessal deposits in the west to the Citronelle-derived sandy loam and gravel of the east. The vegetation is influenced by this gradient, and one can expect to find a variety of species, from those of mixed mesophytic areas in loessal deposits to those of coastal plain piney woods in the southeastern part of the county. Third, rare plants and plant communities can be observed and reported to the Mississippi Natural Heritage Program as a foundation for conservation work in the area.

THE PHYSICAL ENVIRONMENT

Amite County, Mississippi, is located in southwestern Mississippi (Fig. 1). Amite County borders East Feliciana Parish, St. Helena Parish, and Tangipahoa Parish, Louisiana, on the south at 31.00°N; Wilkinson County, Mississippi, on the west at approximately 91.06°W; Pike County, Mississippi, on the east at approximately 90.55°W; and Franklin County and Lincoln County, Mississippi, on the north at approximately 31.35°N. The county is generally rectangular but is irregular in the northwestern corner where the boundary follows a historical path of Foster Creek and of the Homochitto River.

Amite County is about 30 miles east to west by about 24 miles north to south, encompassing 732 square miles (1874 km² or 466,560 acres) (Milbrandt 1976). The population in 1990 was 13,328 people (Clark 1997), with the only incorporated towns being Liberty, Gloster, Centreville, and Crosby.

Climate.—Weather data supplied by the National Climatic Data Center (NOAA) for 1962–1997 are summarized in Table 1. Amite County is mild and humid with major weather influence from the Gulf of Mexico. The temperature ranges from an average maximum of 91.6°F (33.1°C) in July to an average minimum of 33.4°F (0.8°C) in January. The frost-free growing season lasts on

TABLE 1. Climatic data for Amite County, Mississippi. Based on data from the National Climatic Data Center, National Oceanic and Atmospheric Administration, for Liberty Station, 1962–1997.

MONTH	TEMPERATURE (°F)					rainfall (inches)
	mean	mean maximum	mean minimum	mean # of days with max $\geq 90^\circ$	mean # of days with min $\leq 32^\circ$	
January	45.2	56.9	33.4	0	15.1	5.85
February	48.9	61.5	36.3	0	11.4	5.44
March	57.0	69.9	44.1	0	4.9	6.42
April	64.7	77.6	51.8	0.2	0.5	5.15
May	71.5	84.0	58.9	3.9	0	5.17
June	77.9	90.1	65.6	17.0	0	5.13
July	80.3	91.6	68.9	23.2	0	5.29
August	79.7	91.5	67.8	22.6	0	4.48
September	75.4	87.6	63.2	11.9	0	4.60
October	64.9	79.3	50.4	2.0	0.5	3.06
November	56.2	69.3	43.0	0	6.3	4.67
December	48.5	60.7	36.3	0	13.9	6.21
ANNUAL	64.2	76.7	51.6	81.3	51.6	61.47

average from March 22 until November 3, or about 227 days. For the years available, the temperature never dropped below 3°F (-16°C), and the average number of days per year with even a minimum temperature of 32°F (0°C) is 52. Average annual rainfall is 61.5 inches (154 cm), with the driest months in autumn and the wettest in winter and early spring. See Milbrandt (1976) for additional climate information.

Disturbance.—Forestry, agriculture, and fire are the major causes of vegetation disturbance. Although many fires are set as part of forestry management practices, numerous fires are presumably natural. For the years 1959–1998, an average of 2078 acres of land burned each year in Amite County with a range of 402 to 6137 acres per year (Mississippi Forestry Commission, pers. comm.). Tornadoes are also a major natural cause of disturbance. From 1984 to 2000, there were 12 tornadoes, damaging an average area of 1144 acres each (Mississippi Forestry Commission, pers. comm.). More data on the effects of forestry and agriculture can be found under the section entitled *Present Vegetation Types and Land Use*.

Topography.—Amite County lies within the generalized gulf coastal plain physiographic province (Fenneman 1938) and consists of rolling hills cut by several shallow valleys. The northwestern corner of the county deviates from this pattern somewhat by its dissection, and probably belongs to Fenneman's (1938) loess hills physiographic belt. Elevation in the county ranges from 136 feet above sea level along the Homochitto River to 500 feet in the northeastern

part of the county. Large bluffs and ravines are only locally common, concentrated in the Homochitto River basin and along the forks of the Amite River. Amite County is mapped on the USGS topographic maps Auburn, Berwick, Bewelcome, Busy Corner, Centreville, Crosby, Gillsburg, Gloster, Homochitto, Lake Tangipahoa, Liberty, Peoria, Smithdale, Street, and Terrys Creek 7.5' series.

Numerous rivers and streams traverse the county (Fig. 1). The heavily dissected area in the northwestern part of the county belongs to the Homochitto River drainage, which flows into the Mississippi River. Small parts of the Buffalo River drainage, which also flow into the Mississippi River, drain the county just west of Gloster. Most of the rest of the county lies within the Amite River drainage, which includes the West Fork Amite River, East Fork Amite River, Comite River, and Beaver Creek. This is the first drainage east of the Mississippi River that does not flow into the Mississippi River; it empties into Lake Maurepas of Louisiana. The Tickfaw River drains a part of the southeastern corner of the county, and the Tangipahoa River drains a very small part of the northeastern corner of the county.

Geology. Most of Amite County rests upon reddish sedimentary deposits of sand, silt, clay, and gravel called the Upland Complex of the Citronelle Formation (Bicker 1969; Spearing 1995). These sediments were probably deposited in the Pliocene or Pleistocene (~2 to 17 million years ago) as a broad alluvial fan of many streams (Doering 1935, 1956; Spearing 1995). Mineral composition (Spearing 1995), along with freshwater mussel (Stern 1976) and stonefly (Alford 1998) distributions, suggest an Appalachian origin to these sediments.

The very northwestern corner of the county rests upon Miocene deposits that are, like much of the Citronelle deposits, obscured by a layer of loess. The Miocene deposits consist of green and bluish-green clay, sandy clay, gray siltstone, and sand and are locally fossiliferous (Bicker 1969). Thought to be wind-blown deposits from glacial till (Krinitzsky & Turnbull 1967), the loess—unlike most coastal plain soils—is rich in calcium and magnesium, has higher pH, and is able to retain a larger percentage of water (Caplenor 1968; Krinitzsky & Turnbull 1967). Loess deposits that are less than 8 ft (2.5 m) deep, however, like those in Amite County, are often leached of their calcium (Krinitzsky & Turnbull 1967). Areas with significant loessal soil are easily recognized from the adjacent coastal plain because they do not support the longleaf pine vegetation so characteristic of much of the eastern gulf coastal plain.

Larger deposits of loess are farther west in neighboring Wilkinson County, Mississippi, where they reach 100 feet deep (Krinitzsky & Turnbull 1967). From this narrow band called the “Tunica Hills,” a gradually thinner layer of loess is deposited eastward, resulting in a gradient from thick loess rolling hills in the west to a thin layer of loess in the east called brown loam (Milbrandt 1976; Milbrandt & Hale 1968; Leggett et al. 1968). Although the loess bluffs and thick loess (>2.5 m deep) region has been recognized as a distinct physiographic belt

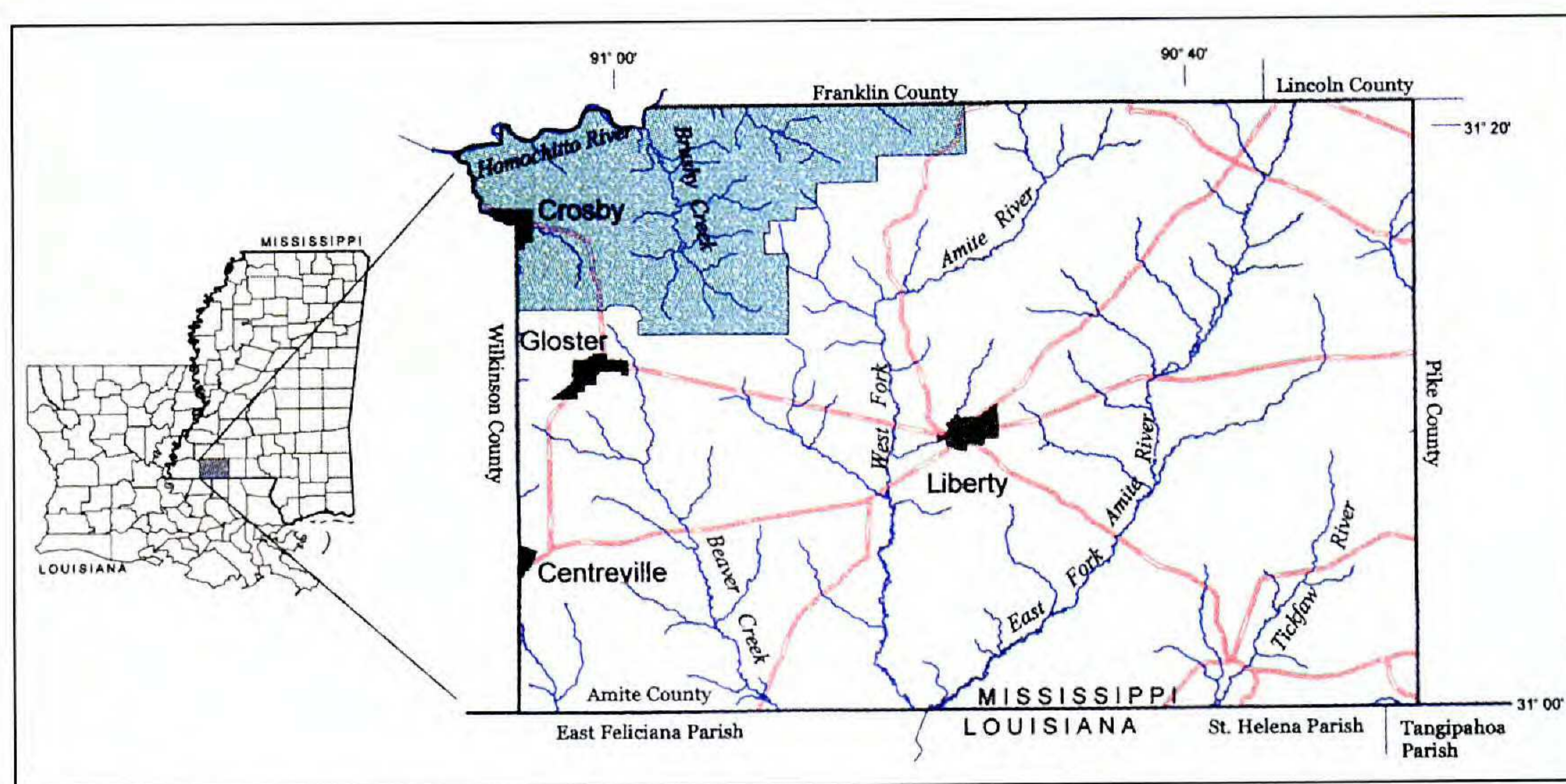


FIG. 1. Map of Amite County, Mississippi. Major highways are in pink, rivers in blue, incorporated areas (towns) in gray, and the Homochitto National Forest in green.

in the coastal plain province (Fenneman 1938; Holmes & Foster 1908; Lowe 1913), the thin loess region has generally been lumped into the “longleaf pine belt” or “southern pine hills” belt.

Soils.—As just discussed under *Geology*, an important component of the soils of Amite County is loess (brown loam). The loess is thickest in the west and thins to an almost undetectable layer in the southeast (Fig. 2).

According to Milbrandt (1976), there are seven major soil associations in Amite County (Fig. 2). Two associations, Gillsburg-Ariel-Peoria and Collings-Bude, are floodplain soils that are nearly level and poorly drained. The major upland associations, Providence-Bude and Providence-Ruston, consist primarily of small slopes with moderately well-drained soils based on loam (loess or loess-derived). One other major upland soil association is found along margins of major river dissection. This Saffell-Smithdale-Providence association, which is hilly and often consists of much gravel and silt, is of particular botanical interest, as will be noted later. In the southeastern corner of the county, the soil is less influenced by loess, tends to be better drained, and often has a reddish (instead of brown) color. It is named the Ora-Smithdale-Providence association. In the northwestern corner, the soil is influenced by loess but is highly dissected and often has a clayey subsoil. This clayey subsoil frequently outcrops where loess has been eroded at high hills in the Homochitto River basin. These areas are where one is most likely to find longleaf pine and associated species in the region.

THE BIOLOGICAL ENVIRONMENT

Presettlement Vegetation and Early History.—In 1720, only about 700 European settlers lived in Mississippi, mostly confined to the areas around present-day



FIG. 2. Soil map of Amite County, Mississippi (adapted from Milbrandt, 1976). The Gillsburg-Ariel-Peoria association (flood plain) is in light green, Collings-Bude (flood plain) in dark green, Ora-Smithdale-Providence (upland coastal plain) in yellow, Providence-Bude in orange, Providence-Ruston (shallow loess) in blue, Saffell-Smithdale-Providence (often gravelly) in red, and Smithdale-Susquehanna (loam over clayey subsoil) in magenta.

Natchez and Vicksburg (Gillis 1963). A massacre by the Natchez Indians in 1729 eliminated most Europeans from the state, and settlement did not begin again until 1763 when Great Britain acquired the land from France. Settlement increased quickly during the Revolutionary War, when the land was under Spanish control. The Spanish census of the region in 1792 showed 4690 people living in Mississippi, most still confined to areas near the Mississippi River (Gillis 1963). However, in areas close to Amite County, there were already 112 families along Buffalo Creek and 136 families along the Homochitto River (Gillis 1963).

Amite County was officially separated from Wilkinson County in 1809 while Mississippi was still a territory (Clark 1997). The population continued to grow at an astonishing rate: the census of 1820 showed 6859 people in Amite County, 2833 of whom were slaves (Darby & Dwight 1836, U.S. Census 1820). In only four years (1816-1820), the population of neighboring Pike County grew from 330 families [~1500? people] (Gillis 1963) to 5402 people (Darby & Dwight 1836; U.S. Census 1820), also attesting to the rapid influx of people into the area. Furthermore, by 1840, 9511 people lived in Amite County (U.S. Census 1840). Additional history of the county and surrounding area can be found in Casey and Otken (1948), Casey et al. (1950), and Casey (1957).

Because Mississippi—like most of the United States outside of the original thirteen colonies and Texas—was surveyed in a standardized rectangular format (cf. Pattison 1957), the presettlement (or at least early) vegetation can be inferred from surveying records. “Marked trees” or “bearing trees” at each quarter-section can be evaluated statistically for bias and used as a statistical sample of the woody vegetation. Many areas were surveyed long before settlement, but other areas—like that in question here—were settled at approximately the same time as the surveys. Amite County was surveyed in 1847 and 1848. Because the Land Ordinance of 1785 gave priority to previous surveys in these regions (Pattison 1957), any areas already settled and surveyed by the time of the rectangular survey are readily noted on a political map as irregularly shaped sections. Therefore, one can safely assume that most early settlement (and disturbance of vegetation) in Amite County was along major rivers and streams, as the irregular so-called “Spanish Land Grants” occur in these areas.

A statistical analysis of the land survey records for determining presettlement vegetation has shown much promise (Bourdo 1956). However, the surveying of Amite County was accomplished by three different people with varying degrees of botanical expertise and note-taking, and the data are not statistically useful. As a coarse-grained tool, though, the data are interesting. For instance, in the southwestern part of the county (Township 1 North, Range 2 East), 37% of corners were described as “oak, gum, beech” forest, 35% included “pine” in the description, and only 7% were described as “timber all gone.” Most vegetation descriptions were permutations of oak (*Quercus* spp.), gum (*Liquidambar styraciflua* and/or *Nyssa sylvatica* and *N. biflora*), beech (*Fagus grandifolia*), pine (*Pinus* spp.), holly (*Ilex opaca*), bay (probably *Magnolia grandiflora* or *M. virginiana*), and hickory (*Carya* spp.). In the eastern part of the county (Township 1 North, Range 4 East), however, the survey repeats again and again “poor pine land,” probably of *Pinus palustris*, with only a few references to oak and hickory.

A neighboring area has been studied in this fashion (Delcourt & Delcourt 1974). Delcourt and Delcourt (1974) show that much of West Feliciana Parish, Louisiana, was dominated by a presettlement forest of *Fagus grandifolia*, *Magnolia grandiflora*, and *Ilex opaca*. However, West Feliciana Parish is a special case, because it almost entirely falls into the loess hills belt of the coastal plain province (Fenneman 1938). And, not surprising, in the northeast corner of West Feliciana Parish, not far from the border of Amite County, Mississippi, Delcourt and Delcourt (1974) record a forest composition change to *Quercus alba*, *Pinus* sp. or spp., and *Fagus grandifolia*. Whether or not this presettlement forest was or was like the climax forest of the area is beyond the scope of this paper but has been much discussed (Blaisdell et al. 1974; Delcourt & Delcourt 1974, 1977, Hodgkins 1958; Kurz 1944; Monk 1965, 1968; Nesom & Treiber 1977; Pessin 1933; Quarterman & Keever 1962; Wells 1942).

The best available information on the presettlement vegetation of Amite

County is probably from notes of botanically-trained individuals who traveled through the region before heavy settlement. Darby and Dwight (1836), while describing neighboring Wilkinson County as “one of the most productive cotton districts in the U.S.,” describe Amite County with “some good land ... along and near the streams, [although] the great body of the county is ... covered with fine timber [presumably *Pinus palustris*].” Darby (1817) describes the vegetation of the thick loess, which would include Wilkinson County and perhaps some of Amite County, as “thickly timbered” and lists 33 species—all hardwoods—as the primary timber, including seven species of oak and four of hickory. Darby (1817) also lists some prominent vines and understory shrubs, most notably *Vitis* spp. and “brakes of the arundo gigantea (great cane)” [*Arundinaria gigantea*]. As one moves east, Darby (1817) describes the land in Amite County becoming of three qualities: “alluvion near the streams, that species of slopes called Hammock, and the open pine hills.” The eastern half of Amite County and eastward then become forests of longleaf pine with an admixture of *Quercus falcata*, *Q. alba*, and *Liquidambar styraciflua* (Darby 1817). Darby’s three categories correspond directly with the present vegetation types given later: bottomland hardwood forest, ravines / upland hardwood and mixed forest, and longleaf pine / loblolly-shortleaf pine forests for alluvion, hammock, and open pine hills, respectively.

Visits to the area by William Bartram in 1787 also confirm this general pattern (Harper 1958). Although Bartram did not travel through Amite County, he gives a personal account of the loess hills vegetation, noting that pine was “viewed here as a curiosity” and that eleven species of hardwoods were the “magnificent” trees of the forest here, while farther east pines were the dominant trees.

For the years 1807–1809, Cuming describes western Wilkinson County as “hilly, ... [with] the soil rich, though thinly inhabited”; other areas in Wilkinson County he describes as “comparatively well cultivated” (Thwaites 1904). He also writes of a trip through forest just south of the Mississippi border in Louisiana “abounding with that beautiful and majestick [sic] evergreen, the magnolia or American laurel” (Thwaites 1904), affirming the interpretation of land survey records by Delcourt and Delcourt (1974).

Studies this century (Holmes & Foster 1908, Lowe 1913) continued to record a vegetation pattern similar to that of Darby (1817): hardwood in extreme western Wilkinson County, followed by a mixed pine-hardwood forest, followed by longleaf pine forest from eastern Amite County eastward. Holmes and Foster (1908) report that Wilkinson County was 63% cleared, Amite County was 25% cleared, and Pike County (still including Walthall County) was 30% cleared. These figures do not imply that the uncleared land was primary forest, as the authors also speak of large tracts of secondary woods (Holmes & Foster 1908). Secondary woods, Holmes and Foster (1908) assert, became dominated by *Pinus taeda* rather than *Pinus palustris*.

Recent Botanical Effort.—Amite County has been visited a number of times this century by botanists. The earliest collections from the county were by Andrew Allison (1903–1907) and Thomas Bailey (1915–1916), which were subsequently noted in E.N. Lowe’s “Plants of Mississippi: A List of Flowering Plants and Ferns” (1921). Despite its antiquated nomenclature and several inaccuracies, Lowe’s compilation was the only statewide checklist of plants for Mississippi until the publication of Kartesz (1999). A. J. Eames visited the county in 1942, but only one specimen has been seen (*Phoradendron leucarpum*, Eames s.n. [BH!]).

The 1960s and 1970s showed the greatest amount of floristic work in Amite County. Louis Temple (MISS and later Mississippi College), Clair Brown (LSU), and especially Samuel B. Jones, Jr. (University of Southern Mississippi and later GA) and Jones’s accompanying wife, students, and friends made numerous collections, turning up rarities for the area such as *Chromolaena ivifolia* and *Hydrangea arborescens*. Jones and associates collected over 250 specimens from the county. Collections since that time have mostly been limited to small student collections. One exception is the late John Allen Smith, a local school teacher who was contracted by the Mississippi Natural Heritage Program to find rare plants in the Homochitto National Forest. He located several populations of *Antennaria solitaria*, *Mikania cordifolia*, *Pachysandra procumbens*, and *Stewartia malacodendron* in the county.

Present Vegetation Types and Land Use.—The vegetation of Amite County is now mostly (if not exclusively) secondary. This is not surprising considering the early settlement coupled with an economy based primarily upon timber, beef cattle, and dairy cattle. Despite this somber note, one may be surprised that 78% of the county is forested and 22% is open land (Mississippi Forestry Commission 1998), an irony primarily due to the resurgence of the timber industry through tree farming.

Today, dairy production is restricted mostly to the southeastern corner of the county, an area once dominated by longleaf pine. Beef farms remain scattered throughout the county. Dairy and beef cattle production are the two major reasons for open land in the county, with smaller areas attributed to crops such as corn, soybeans, and ryegrass. Timber harvesting, too, continues throughout the county but in this age of tree farming leaves open areas only for short periods between harvest and replanting operations. In the year 1998, the merchantable timber (growing stock) in Amite County was estimated to be 309.0 million cubic feet of pine and 206.1 million cubic feet of hardwood (Mississippi Forestry Commission 1998). Only three counties in Mississippi have a greater volume of merchantable pine timber. During that same year, 68,314 MBF (thousand board feet, Doyle Rule) of pine were harvested, 5033 MBF of hardwood were harvested, 103,946 cords of pine pulpwood were harvested, and 68,689 cords of hardwood pulpwood were harvested (Mississippi Forestry Commission 1998).

Forestry management practices differ throughout the county. The north-

western corner of the county, for instance, is part of the Homochitto National Forest, and as such enjoys relatively longer timber rotation times, mandatory streamside protection zones, several older-growth areas, and even longleaf pine management and replacement. The rest of the county is owned privately, and timber production and management is determined more by economics and by soil properties. In the western part of the county, where the loess deposits are relatively thick, harvested areas require much attention (e.g., burning, disking, chemical treatments) because of rapid post-harvest non-timber growth (E. Alford, Mississippi Forestry Commission, pers. comm.). Open areas are quickly exploited by trees such as *Liquidambar styraciflua* and *Acer rubrum* var. *rubrum* and other plants such as *Rubus* spp., *Lactuca* spp., and *Eupatorium* spp. The eastern part of the county, where the soil is less loessal, is not quickly exploited by vigorous undergrowth, and thus timber practices like seed-tree regeneration are more common (E. Alford, Mississippi Forestry Commission, pers. comm.).

Pine forests comprise 45% of forested lands in the county. Mixed forest (19%) and hardwood forest (36%) also make up a sizable portion of forested land in the county (Mississippi Forestry Commission 1998). Of the pine forests, the primary type is loblolly or loblolly-shortleaf, and most hardwood forests belong to bottomland forests, with fewer acres in uplands and ravines, swamps, and other areas.

For purposes of explaining general vegetation patterns and to give the reader a background template upon which to interpret the vascular plant checklist, the vegetation of Amite County is divided into twelve categories. Naturally, this is a simplification and overlooks variation in a great continuum. A short description and common species of each type will be given (in alphabetical order, so as not to imply a rigorous statistical measurement of abundance). Species primarily restricted to certain types are noted, as are rare species. In general, these vegetation types correspond to those of Allen (1972), modified by the author and treatments by Braun (1950), the United States Forest Service (1995), Christensen (2000), Clewell (1985), and Delcourt and Delcourt (2000).

1. Longleaf Pine Forest (Fig. 3).—Longleaf pine forest is uncommon in the county, occurring only in scattered localities in the southeast and in the northwestern corner on high ridges of the Homochitto River basin. Typically, these forests are upland, open, and regularly burned. The dominant tree species, of course, is *Pinus palustris*, which is usually accompanied to some extent by *P. echinata* or *P. taeda*. Depending on the burning regime, other associates may include *Callicarpa americana*, *Carya tomentosa*, *Cornus florida*, *Crataegus* spp., *Diospyros virginiana*, *Ilex vomitoria*, *Malus angustifolia*, *Morella cerifera*, *Quercus falcata*, *Q. marilandica*, *Q. stellata*, *Rhus copallina*, *Vaccinium arboreum*, and *V. stamineum*. The understory is dominated by composites, grasses, and legumes, primarily *Andropogon virginicus*, *Aristida* spp., *Desmodium* spp., *Lespedeza*



FIG. 3. Photographs of major vegetation types in Amite County, Mississippi—I. Upper: longleaf pine forest. Middle: loblolly-shortleaf pine forest. Lower: Homochitto ravine. Note the *Magnolia grandiflora*, *Fagus grandifolia*, *Arundinaria gigantea*, and the predominance of hardwoods.

repens, *Schizachyrium scoparium*, *Symphyotrichum dumosum*, *S. patens*, and *Tephrosia spicata*. Some species in the county are found primarily in these forests, such as *Aletris aurea*, *Asclepias viridiflora*, *A. viridis*, *Drosera brevifolia*, *Ionactis linariifolius*, *Liatris elegans*, *L. pycnostachya*, *Phlox pilosa*, *Polygala incarnata*, *Pycnanthemum albescens*, *Quercus incana*, *Rhynchosia reniformis*, *Symphyotrichum adnatum*, and *Tragia smallii*. An example of this vegetation type is on private property about six miles south-southeast of Liberty, T2N R4E Sec 28 NW/4. An example from the Homochitto National Forest is at the intersection of West Homochitto Road and Royal Chapel Road, T4N R2E Sec 19 E/2. All longleaf pine forest is on upland sites, and thus, there are no flatwoods (sensu Clewell 1985) in the county.

2. Loblolly–Shortleaf Pine Forest (Fig. 3).—This is the most abundant vegetation type in the county. Under this category are included old field pine succession, mature upland non-longleaf pine forest, and pine plantation. These forests are dominated by *Pinus taeda*. If burning is frequent or the soil is gravelly or sandy, *Pinus echinata* becomes a clear co-dominant species. Understory or suppressed species include *Acer rubrum* var. *rubrum*, *Diospyros virginiana*, *Ilex vomitoria*, *Liquidambar styraciflua*, *Quercus falcata*, *Prunus serotina*, *Rhus copallina*, and *Vaccinium arboreum*. The ground layer is typically species-poor in unburned or plantation pine, inhabited by *Callicarpa americana*, *Clitoria mariana*, *Desmodium* spp., *Dichondra carolinensis*, *Lonicera japonica*, *Lygodium japonicum*, *Mimosa microphylla*, *Oxalis* spp., *Panicum* spp., *Rubus* spp., *Toxicodendron radicans*, and *Vitis rotundifolia*. Some pine plantations may consist of only *Pinus taeda* and *Lygodium japonicum*. With burning arrives *Hypoxis hirsuta*, *Lespedeza* spp., and *Tephrosia virginiana*. Mature, open loblolly-shortleaf pine forest is home to *Andropogon ternarius*, *A. virginicus*, *Aristida* spp., *Asclepias tuberosa*, *Cirsium carolinianum*, *Coreopsis* spp., *Eragrostis* spp., *Gentiana villosa*, *Helianthemum carolinianum*, *Hypericum drummondii*, *Ipomoea pandurata*, *Liatris squarrulosa*, *Oxalis dillenii*, *Polygala mariana*, *P. nana*, *Rhus glabra*, *Rosa carolina*, *Ruellia caroliniensis*, abundant *Schizachyrium scoparium*, *Sabatia* spp., *Scleria* spp., *Scutellaria integrifolia*, *Seymeria cassioides*, *Solidago odora*, *Stylosanthes biflora*, *Vernonia texana*, and *Viola pedata*. Wet ditches and old roads through these forests further add species such as *Carex glaucescens*, *Cyperus* spp., *Hypericum mutilum*, *Ludwigia* spp., *Rhynchospora inexpansa*, and *Xyris laxifolia* var. *iridifolia*. Rarer species in these forests include *Galactia erecta*, *Gaylussacia dumosa*, *Ludwigia hirtella*, *Oenothera linifolia*, *Orbexilum pedunculatum*, *Rhynchosia tomentosa*, *Scutellaria incana*, and *Trichostema setaceum*. An example of this type of vegetation is at the northern corner of the intersection of Mary Wall Bridge Road and River Road, T1N R5E Sec 19 W/2.

3. Upland Hardwood and Mixed Forest.—This vegetation type is also known as oak-pine or oak-pine-hickory forest. This type is quite similar to loblolly-

shortleaf pine vegetation, only that the dominant and co-dominant hardwoods more conspicuously join the pines, especially *Carya pallida*, *C. tomentosa*, *Cornus florida*, *Fraxinus americana*, *Hamamelis virginiana*, *Ilex decidua*, *I. longipes*, *Ostrya virginiana*, *Prunus serotina*, *Quercus alba*, *Q. falcata*, *Q. hemisphaerica*, *Q. nigra*, *Q. velutina*, *Ulmus alata*, *Vaccinium elliotii*, and *Viburnum scabrellum*. The herbaceous layer tends to be less developed, and species like *Chasmanthium sessiliflorum*, *Matelea gonocarpos*, *Mitchella repens*, *Polystichum acrostichoides*, and *Smilax pumila* join the list. Uncommon species found in this vegetation type are *Chamaelirium luteum*, *Lilium michauxii*, *Malaxis unifolia*, *Polygonatum biflorum*, *Smilax pulverulenta*, and *Tipularia discolor*. An example of this type of vegetation is found near the pipeline crossing on Dickey Mills Road, T3N R6E Sec 31 S/2.

4. Ravines.—These areas are also known as hammocks and bluffs. The typical ravine is rich in both woody and herbaceous species. Common trees and large shrubs include *Carpinus caroliniana*, *Carya* spp., *Cornus florida*, *Fagus grandifolia*, *Frangula caroliniana*, *Hamamelis virginiana*, *Hydrangea quercifolia*, *Ilex opaca*, *Liriodendron tulipifera*, *Magnolia acuminata*, *Ostrya virginiana*, *Oxydendrum arboreum*, *Quercus alba*, *Q. michauxii*, *Q. pagoda*, *Q. velutina*, and *Viburnum rufidulum*. Common herbaceous species include *Carex* spp., *Chasmanthium sessiliflorum*, *Melica mutica*, *Oxalis violacea*, *Podophyllum peltatum*, *Phlox divaricata*, *Sanicula smallii*, *Spigelia marilandica*, and *Viola walteri*. Less common species that are found primarily in this type of vegetation are *Antennaria solitaria*, *Aristolochia serpentaria*, *Carya cordiformis*, *Dioscorea quaternata*, *Ilex ambigua*, *Matelea carolinensis*, *Phegopteris hexagonoptera*, *Schisandra glabra*, *Solidago auriculata*, *Spiranthes ovalis*, *Stewartia malacodendron*, and *Uvularia perfoliata*. Ravines are often the areas preserved by private landowners, and whether or not these rarer species are restricted to these areas because of their vegetation–edaphic properties or as a result of less disturbance is unknown.

Ravines fall into two major subtypes: **A. Homochitto Ravines** (Fig. 3).—These ravines are located in the Homochitto National Forest and surrounding areas. They generally have a thick loess layer over Miocene deposits, and the hills are highly dissected. These ravines have the conspicuous addition of *Acer barbatum*, *Magnolia macrophylla*, *Quercus shumardii*, and *Symplocos tinctoria* (as a mid- to upper-slope tall shrub) and much more abundant *Magnolia acuminata* and *Pinus taeda*. In the understory, ferns reach their peak with large areas dominated by *Phegopteris hexagonoptera*, *Polystichum acrostichoides*, and *Thelypteris kunthii*. Also added are *Antennaria solitaria*, *Botrychium virginianum*, abundant *Carex flaccosperma*, *Cynoglossum virginianum*, *Laportea canadensis*, *Mikania cordifolia*, *Piptochaetium avenaceum*, *Smilax pumila*, *Urtica chamaedryoides*, and *Woodsia obtusa*. Because of the dissection of land in parts of the Homochitto National Forest, there can often be a continuum between this type, upland hard-

wood and mixed forest, and pine forest, depending on the size of the ridges. An example of this type of vegetation can be found in the Homochitto National Forest off New Hope Road in T3N R2E Sec 12.

B. Gravel or Saffell outcrops.—Gravel outcrops occur primarily as ridges along the margins of the Amite River and associated large drainages. The soil here is very gravelly and sandy, and species like *Carya glabra*, *Frangula caroliniana*, *Styrax grandifolius*, and *Tilia americana* var. *caroliniana* become more common. One adds many species seldom found elsewhere in the county, including *Agrimonia microcarpa*, *A. rostellata*, *Cocculus carolinus*, *Desmodium glutinosum*, *D. nudiflorum*, *D. rotundifolium*, *Fleischmannia incarnata*, *Lithospermum tuberosum*, *Phryma leptostachya*, *Physalis heterophylla*, *Potentilla simplex*, *Quercus coccinea*, *Silene stellata*, *Smallanthus uvedalius*, *Symphotrichum drummondii* var. *texanum*, and *Tragia cordata*. *Pleopeltis polypodioides* var. *michauxiana* can be found here growing both epiphytically and on outcrops of conglomerate rock and sandstone. *Pachysandra procumbens* is also found here in one locality. An example of this vegetation type can be found at the Ethel S. Vance Natural Area just west of Liberty on MS Hwy 24, T2N R4E Sec 6 SE/4.

5. Bottomland Hardwood Forest (Fig. 4).—Bottomland forest, too, is very rich in both woody and herbaceous species. There is much variability in this type, and one subtype is provided for the most conspicuous outlier. There is also some intergradation with spring-seeps and swamps, ponds and lakes, and streamsides, each of which is considered a separate category. Typically, bottomland hardwood forest is dominated by *Asimina triloba*, *Carpinus caroliniana*, *Fagus grandifolia*, *Halesia diptera*, *Ilex opaca*, *Liquidambar styraciflua*, *Liriodendron tulipifera*, *Magnolia grandiflora*, *Quercus laurifolia*, *Q. nigra*, *Q. michauxii*, *Q. pagoda*, and *Symplocostictoria*. Lianas include *Berchemia scandens*, *Decumaria barbara*, and *Smilax* spp. Herbaceous vegetation can commonly be non-existent in deeper forest, but at edges, small openings, small drains, and woods roads appear *Carex intumescens*, *C. jorii*, *C. lurida*, *Chasmanthium laxum*, *Cuphea carthagenensis*, *Elephantopus carolinianus*, *Gratiola* spp., *Hexastylis arifolia*, *Hydrocotyle* spp., *Hymenocallis caroliniana*, *Impatiens capensis*, *Leersia virginica*, *Lycopus virginicus*, *Macrothelypteris torresiana*, *Packeria glabella*, *Polygonum* spp., *Ranunculus abortivus*, *R. pusillus*, *Rhynchospora caduca*, *R. glomerata*, *Samolus valerandi* ssp. *parviflorus*, *Saururus cernuus*, *Selaginella apoda*, *Thelypteris kunthii*, *Verbesina walteri*, and *Viola primulifolia*. Uncommon species found primarily in bottomlands are *Circaea lutetiana* ssp. *canadensis*, *Claytonia virginica*, *Listera australis*, *Solidago discoidea*, and *Trillium foetidissimum*. In the Homochitto drainage, *Acer rubrum* var. *drummondii*, *Geum canadense*, *Lindera benzoin*, and *Ulmus americana* join the list. Bottomland forest is commonly invaded by exotics, especially *Ligustrum sinense* and *Lygodium japonicum*. An example of the generalized type can be found at the Ethel S. Vance Natural Area just west of Liberty on MS 24 at the West Fork Amite River, T2N R4E Sec 6 S/2.



FIG. 4. Photographs of major vegetation types in Amite County, Mississippi—II. Upper: bottomland hardwood forest. Middle: swamp, here dominated by *Nyssa biflora* and *Cephalanthus occidentalis*. Lower: abandoned farm pond, with *Hydrocotyle* and *Saururus* evident.

There is one major distinctive subtype of bottomland forest. *Magnolia-Beech-Spruce Pine-Illicium Thickets*.—The locals call this type of vegetation “stink-bush thickets.” These are forests of *Fagus grandifolia*, *Magnolia grandiflora*, and *Pinus glabra* with a dense understory of *Illicium floridanum*. Often there are no herbaceous plants, and the *Illicium floridanum* can become impenetrable. Occasional species in these areas are *Athyrium filix-femina*, *Epidendrum conopseum*, *Epifagus virginiana*, *Polystichum acrostichoides*, *Stewartia malacodendron*, *Symplocos tinctoria*, and the rare *Trichomanes petersii*. An example of this type can be found along the East Fork Amite River just south of South Greensburg Road, T1N R4E Sec 27.

6. Spring-Seeps and Swamps (Fig. 4).—Spring-seeps and swamps fall into the broader category of forested wetlands. Woody species typically include *Cephalanthus occidentalis*, *Fraxinus pennsylvanica*, *Ilex opaca*, *I. verticillata*, *Itea virginica*, *Magnolia virginiana*, *Nyssa biflora*, *Photinia pyrifolia*, *Quercus* spp., *Sabal minor*, *Smilax laurifolia*, and *Viburnum nudum*. The herbaceous layer consists of *Carex albolutescens*, *C. intumescens*, *C. leptalea*, *C. lonchocarpa*, *C. lurida*, *Gratiola floridana*, *Hydrocotyle* spp., *Osmunda cinnamomea*, *O. regalis* var. *spectabilis*, *Panicum gymnocarpon*, *P. rigidulum*, *Pilea pumila*, *Polygonum* spp., *Proserpinaca palustris*, *Sparganium americanum*, *Triadenum walteri*, *Viola primulifolia*, and *Woodwardia areolata*. Uncommon species found primarily in these areas include *Arnoglossum plantagineum*, *Dryopteris ludoviciana*, *Leucothoe racemosa*, *Melanthium virginicum*, *Platanthera flava*, *Smilax walteri*, *Spiranthes cernua*, *Stachystenuifolia*, and *Woodwardia virginica*. In occasional ox-bows, *Taxodium distichum* will form monotypic stands. *Asclepias perennis*, *Carex decomposita*, and *Leersia lenticularis* are uncommon species that occur in these areas. A typical swamp can be found at the Ethel S. Vance Natural Area just west of Liberty on MS 24 downhill from the above-mentioned Saffell outcrop, T2N R4E Sec 6 S/2. Several typical spring-seeps can be found on school lands near Royal Chapel, T4N R2E Sec 18 NE/4. A mature baldcypress swamp can be found in the Homochitto National Forest, Brushy Creek at Robertson Road, T4N R2E Sec 2 SW/4.

7. Cultivated and Fallow Fields.—Land that is under cultivation or has been under cultivation recently (including home gardens) falls into this category. The common species are typical weedy herbs, including *Amaranthus spinosus*, *Brassica rapa*, *Cyperus rotundus*, *Eclipta prostrata*, *Geranium carolinianum*, *Jacquemontia tamnifolia*, *Lolium perenne*, *Physalis angulata*, *Raphanus raphanistrum*, *Senna obtusifolia*, *Sesbania herbacea*, *Solanum carolinense*, *Soliva pterosperma*, *Trifolium repens*, *Urochloa platyphylla*, *Vicia sativa* ssp. *nigra*, and *V. tetrasperma*. Rarely one finds *Melothria pendula*, *Muscari neglectum*, or *Narcissus jonquilla*. An example of this vegetation type can be found in the areas surrounding Pumpkin Patch Creek at MS 569N, T4N R6E Sec 7 S/2.

8. Pastures and Old Successional Fields.—These areas are the conspicuous autumn flower shows. Common species include *Agalinis fasciculata*, *Ambrosia artemisiifolia*, *Andropogon* spp., *Buchnera americana*, *Chrysopsis mariana*, *Croton capitatus*, *Eremochloa ophiuroides*, *Eupatorium* spp., *Helenium amarum*, *H. flexuosum*, *Hordeum pusillum*, *Lactuca* spp., *Lespedeza* spp., *Paspalum* spp., *Pityopsis graminifolia*, *Polypremum procumbens*, *Ranunculus* spp., *Rumex* spp., *Sisyrinchium* spp., *Solidago canadensis*, and *S. gigantea*. In moist pastures, *Cyperus* spp. and *Juncus* spp. become common. Fencerows and edges of this type are home to *Albizia julibrissin*, *Diospyros virginiana*, *Prunus serotina*, and *Triadica sebifera*. An example of this vegetation type can be found along Cut Through Road, T3N R5E Sec 28 N/2.

9. Roadsides.—Roadsides support a diverse array of species, although the habitat and species are generally called “ruderal.” Common species include *Antennaria plantaginifolia*, *Boltonia diffusa*, *Campsis radicans*, *Chamaecrista fasciculata*, *Cicuta maculata* (in ditches or wetter sites), *Erigeron strigosus*, *Helianthus angustifolius*, *Ipomoea cordatotriloba*, *Linum medium*, *Oenothera* spp., *Panicum* spp., *Paspalum dilatatum*, *P. urvillei*, *Plantago aristata*, *Pueraria montana*, *Pyrrhopappus carolinianus*, *Robinia pseudo-acacia*, *Rudbeckia hirta*, *Sorghum halepense*, *Tradescantia ohiensis*, *Tridens flavus*, *Trifolium* spp., *Verbena brasiliensis*, *Vernicia fordii*, and *Vicia villosa*. Uncommon species in this vegetation type are *Ailanthus altissima* (apparently only beginning its spread in southern Mississippi), *Lysimachia lanceolata*, and *Penstemon laxiflorus*, as well as several waifs collected previously but not seen during this study (e.g., *Crotalaria spectabilis*, *Geranium dissectum*).

10. Ponds, Lakes, and Beaver Impoundments (Fig. 4).—This vegetation type encompasses all areas that are in or on the margin of stationary water, primarily ponds, lakes, and beaver impoundments. There is some overlap with the vegetation type “Spring-Seeps and Swamps,” and one should reference that section as well. Common woody plants include *Cephalanthus occidentalis*, *Nyssa biflora*, *Smilax walteri*, and *Taxodium distichum*. The herbaceous layer includes *Bidens* spp., *Brasenia schreberi*, *Eleocharis obtusa*, *Eryngium prostratum*, *Juncus repens*, abundant *Ludwigia* spp., *Nuphar lutea*, *Panicum hians*, *Rhexia mariana*, *Saccharum* spp., *Sagittaria latifolia*, *Sparganium americanum*, *Thelypteris palustris* var. *pubescens*, *Typha latifolia*, and *Utricularia biflora*. Uncommon species in this type include *Carex louisianica*, *Gelsemium rankinii*, *Hydrolea uniflora*, *Potamogeton diversifolius*, and *P. pulcher*. An example of this vegetation type (more precisely, an open beaver impounded pond) can be found at the Ethel S. Vance Natural Area just west of Liberty on MS 24, T2N R4E Sec 7 N/2.

11. Riversides.—Riversides represent a special case of bottomland hardwood forest. The soil often has much more sand and gravel, and the flora is strikingly distinct. Moving upstream, as the rivers become smaller streams, the veg-

etation type, however, begins to grade with bottomland hardwood forest. Riversides are typically dominated by the woody plants *Acer negundo*, *Betula nigra*, *Platanus occidentalis*, and *Salix nigra*. The herbaceous layer includes *Apios americana*, *Carex lupulina*, *Chasmanthium latifolium*, *Cleome hassleriana*, *Commelina diffusa*, *C. virginica*, *Digitaria ciliaris*, *Hygrophila lacustris*, *Justicia ovata* var. *lanceolata*, *Lobelia cardinalis*, *Mikania scandens*, and *Vernonia gigantea*. Uncommon plants found in this vegetation type are *Leersia oryzoides* and *Melochia corchorifolia*. An example of this vegetation type can be found on private property along the West Fork Amite River south of Powell Road, T1N R4E Sec 31.

12. Cemeteries, Yards, and Ruderal Areas in Towns.—This last category incorporates all “ruderal” areas except roadsides, which do share a number of elements. Many species of trees are planted and grow natively in yards, so concentration here will focus on herbaceous species. The most common species are *Cerastium glomeratum*, *Duchesnea indica*, *Galium aparine*, *Glechoma hederacea*, *Houstonia* spp., *Krigia* spp., *Lamium amplexicaule*, *Lepidium virginicum*, *Modiola caroliniana*, *Nothoscordum bivalve*, *Nuttallanthus canadensis*, *Oxalis rubra*, *Paspalum notatum*, *Poa annua*, *Salvia lyrata*, *Sporobolus indicus*, *Stellaria media*, *Trifolium* spp., *Triodanis* spp., *Valerianella radiata*, *Veronica* spp., and *Youngia japonica*. Uncommon species in these habitats include *Cyrtomium falcatum* (sparingly naturalized), *Hedera helix* (expanding only around old home sites), *Lepuropetalon spathulatum* (cemeteries), *Ophioglossum* spp. (cemeteries), *Phyllanthus urinaria* (sidewalk cracks in town), *Plantago heterophylla* (cemeteries), and *Portulaca oleracea* (sidewalk cracks in town). An example of both a yard and ruderal area in town is Old Jackson Road at Pecan Street in Liberty, T2N R4E Sec 4. An example of a cemetery is the Stewart-Wall Cemetery near the intersection of Mary Wall Bridge Road and Mt. Vernon Road, T1N R4E Sec 24.

ANNOTATED CHECKLIST

The following checklist is the compilation of all native, naturalized, or especially long-persisting vascular plant species occurring in Amite County, Mississippi. Families are arranged in alphabetical order under the divisions of Lycopodiophyta, Polypodiophyta, Coniferophyta, Magnoliophyta: Liliopsida (monocots), and Magnoliophyta: Magnoliopsida (dicots). Family delimitation in the Lycopodiophyta, Polypodiophyta, and Coniferophyta follows the system of Kartesz (1999). Delimitation of monocot families follows the system of Dahlgren et al. (1985), which primarily means that the Liliaceae s.l. are split into various smaller families. Delimitation of dicot families generally follows the system of Kartesz (1999) with modifications to avoid polyphyletic or unnatural taxa, especially regarding the older concepts of Saxifragaceae and Loganiaceae. More specifically, *Viburnum* and *Sambucus* are considered part

of Adoxaceae (Donoghue 1983; Donoghue et al. 1992), *Lepurapetalon* part of a broadly defined Celastraceae (Soltis & Soltis 1997), *Itea* part of Iteaceae (Soltis & Soltis 1997), *Penthorum* part of Penthoraceae (Haskins & Hayden 1987; Soltis & Soltis 1997), *Gelsemium* part of Gelsemiaceae, and *Polypreum* part of Buddlejaceae, despite much uncertainty regarding its position (Struwe et al. 1994; Backlund et al. 2000). Labiatae and Verbenaceae are retained and used as set forth in Kartesz (1999), although their circumscriptions are likely to change in the future. Genera and species are in alphabetical order in each family. Species entry data are arranged in the following manner:

[♦ = new state record] [† = species taxonomy or nomenclature differing from Kartesz, 1999] [* = non-native] Species Authority [following Brummitt & Powell 1992], Collection Number. Frequency. Vegetational associations. Note(s).

Species nomenclature (scientific names plus authorities), in general, follows Kartesz (1999). If there is a departure from his system, a cross and a reference citation or note accompanies the entry. The only major departure from his nomenclature is my retention of *Panicum* in the large sense. Because the taxonomy of *Panicum* s.l. is controversial and obviously still rudimentary, I follow the last treatment of the genus for Mississippi (Lelong 1986). Only four hybrids are part of the list: *Eupatorium* × *pinnatifidum*, *Gladiolus* × *gandavensis*, *Rhexia nashii* × *R. virginica*, and *Quercus* × *comptoniae*. Each of these is common enough that explorers of the region should be aware of their presence. If the species is not native, then the citation is accompanied by an asterisk. References for this criterion are Radford et al. (1968), Clewell (1985), Correll & Johnston (1970), Weakley (in prep.), and the Mississippi Natural Heritage Program (pers. comm.).

Specimens have been deposited at DUKE, and duplicates of most species have been deposited at IBE. Additional duplicates have been variously distributed to BEO, BH, LSU, MICH, MISS, NCU, US, the Mississippi Museum of Natural Science (mmns), and the personal herbarium of Charles T. Bryson (ctb) (herbarium abbreviations following Holmgren et al. 1990). Collection numbers with an A refer to Mac H. Alford (also used when other collectors assisted), with an EA refer to E. Earl Alford, Amite County Forester, Mississippi Forestry Commission, and with a WA&M refer to Robert L. Wilbur (DUKE), Mac H. Alford, and Gerry Moore (BKL).

Frequency, a measure of how common and widespread a species is, will follow the pattern outlined in Table 2. For maximal information retrieval, the plant association data is clearly, though sometimes verbosely, described. If the descriptions given are terse, the vegetation types of the previous section are fully adequate to describe the habitat(s) of occurrence.

Any species occurring in Amite County that was not directly planted or vegetatively produced in close proximity to a cultivated individual is considered a part of the flora. For example, *Camellia japonica*, though widely reproducing

TABLE 2. Abundance scale for vascular plants in the checklist of Amite County, Mississippi.

Abundant	Frequent, dominant, or codominant in one or more habitats; widespread.
Common	Relatively frequent; either widespread with scattered localities or frequent in a subset of habitats.
Locally Common	<i>Either</i> widely distributed but completely restricted to a certain habitat <i>or</i> locally distributed with many individuals.
Infrequent	Uncommon in the county, often small populations <i>and/or</i> restricted to certain habitats.
Rare	One or two small populations known from the county.

vegetatively under the growth of planted individuals, is not found outside a close perimeter of planted individuals and was never found in an area where its origin was ambiguous; it is not included. On the other hand, *Cyrtomium falcatum*, though remaining in close vicinity to planted (or persisting) individuals, often produces spore-derived individuals around old, moist concrete foundations and brick walls; it is included. Other species such as *Photinia serratifolia* and *Eunonymus fortunei* show few (if any) signs of reproduction, but persist so long, even after abandonment of property, that they are included, as a botanist is likely to encounter them with little inherent evidence to suggest a cultivated origin.

Methods.—Field collections were made from 1997–2000. Because the county is divided according to the rectangular system of surveying, one section of each township is designated for public schools. These public lands served as evenly distributed points for collection. Because they are maintained by the Mississippi Forestry Commission for various management purposes, a diversity of plant communities and edaphic conditions were available. Public land was also accessible in the Homochitto National Forest, a significant portion of the land area in the northwest corner of the county (Fig. 1). Only one sizeable park occurs in the county, the Ethel S. Vance Natural Area near Liberty. This park, too, was extensively surveyed. Private lands and roadsides were also searched, but usually less extensively and in a more random manner, although a combination of topographic maps and the soil map were used to pinpoint potential interesting areas.

Field identification was undertaken primarily with Clewell (1985), Radford et al. (1968), and Correll and Johnston (1970). Upon return to DUKE, monographs and other references, especially Allen (1992), Bailey (1949), Chapman (1897), FNA (1997), Godfrey (1988), Godfrey and Wooten (1979, 1981), Small (1933), Steyermark (1963), and Weakley (in prep.), were consulted, and specimens were compared to those in the herbarium for accuracy.

Previous collections were consulted at GA, IBE/MISSA, LSU, MICH, and MISS. Several monographic and floristic studies had Amite County marked as occurrences on dot-maps or in specimen citation lists. If these specimens were not seen, the reference is given.

LYCOPODIOPHYTA**SELAGINELLACEAE**

Selaginella apoda (L.) Spring, A1945. Infrequent. Bottomland forest.

POLYPODIOPHYTA**ASPLENIACEAE**

Asplenium platyneuron (L.) B.S.P., A1049. Common. Saffell outcrops, upland hardwood forest, and pine forest.

BLECHNACEAE

Woodwardia areolata (L.) T. Moore, A1296. Locally common. Spring-seeps, swamps, and wooded areas near impoundments.

Woodwardia virginica (L.) Sm., A1719. Rare. Spring-seep in the Homochitto National Forest.

DENNSTAEDTIACEAE

Pteridium aquilinum var. *pseudocaudatum* (Clute) A. Heller, A1695. Common. Roadsides and pine forest.

DRYOPTERIDACEAE

Athyrium filix-femina ssp. *asplenoides* (Michx.) Hultén, A1050. Abundant. Mesic forest and forest roads.

**Cyrtomium falcatum* (L.f.) C. Presl, A1784. Rare. Moist and shady brick and concrete walls.

Cystopteris protrusa (Weath.) Blasdell, A1086. Rare. Sandy bottomland hardwood forest along the Homochitto River.

Dryopteris ludoviciana (Kunze) Small, A2029. Rare. Swamp along the East Fork Amite River.

Onoclea sensibilis L., A1341. Locally common. Roadside ditches, mesic forest, and swamp margins.

Polystichum acrostichoides (Michx.) Schott, WA&M 70921. Abundant. Mesic forest, rich ravines, Saffell outcrops, and upland hardwood forest.

Woodsia obtusa (Spreng.) Torr. ssp. *obtusa*, A2114. Rare. Sandy bottomland forest and associated loessal hills of the Homochitto River basin.

HYMENOPHYLLACEAE

Trichomanes petersii A. Gray, A2028. Rare. Bases of *Fagus grandifolia* trunks near springs of the East Fork Amite River.

LYGODIACEAE

**Lygodium japonicum* (Thunb. ex Murray) Sw., WA&M 71082. Abundant. Roadsides, pine forest, mesic hardwood forest, and swamp margins.

OPHIOGLOSSACEAE

Botrychium biternatum (Savigny) Underw., A352. Common. Forest.

Botrychium virginianum (L.) Sw., A1007. Infrequent. Upland mixed forest, primarily in the Homochitto River basin.

Ophioglossum crotalophoroides Walter. Rare. Sandy lawns and cemeteries. Referenced in Evans (1978); specimen not seen.

Ophioglossum nudicaule L.f. Rare. Lawns, pastures, and cemeteries. Referenced in Evans (1978); specimen not seen.

OSMUNDACEAE

Osmunda cinnamomea L., A524. Infrequent. Spring-seeps and moist ravines.

Osmunda regalis var. *spectabilis* (Willd.) A. Gray, A531. Locally Common. Spring-seeps, swamps, and wooded areas near impoundments.

POLYPODIACEAE

Pleopeltis polypodioides ssp. *michauxiana* (Weath.) E.G. Andrews & Windham, A1526. Locally common. Epiphyte primarily on *Quercus stellata*, *Quercus michauxii*, *Carya illinoensis*, and *Juniperus virginiana* and infrequently growing terrestrially on exposed outcrops of Saffell sandstone.

PTERIDACEAE

Adiantum pedatum L., A2257. Rare. Saffell outcrop along the East Fork Amite River.

THELYPTERIDACEAE

**Macrothelypteris torresiana* (Gaudich.) Ching, A1085. Common. Mesic forest and forest roads.

Phegopteris hexagonoptera (Michx.) Fée, A1289. Infrequent. Hardwood ravines, primarily in the Homochitto River basin.

Thelypteris hispidula var. *versicolor* (R.P. St. John) Lellinger, A1008. Infrequent. Sandy bottomland hardwood forest.

Thelypteris kunthii (Desv.) C.V. Morton, A1339. Common. Mesic forest and forest roads.

Thelypteris palustris var. *pubescens* (G. Lawson)

Fernald, A1342. Infrequent. Swamp margins and perennially wet ditches.

CONIFEROPHYTA

CUPRESSACEAE

Juniperus virginiana L. var. *virginiana*, A1357. Infrequent. Fencerows and old home sites.

Taxodium distichum (L.) L.C. Rich., A1347. Infrequent. Ox-bow sloughs, swamps, and floodplain swales.

PINACEAE

Pinus echinata Mill., A1167. Common. Pine forest and old fields.

**Pinus elliottii* Engelm. var. *elliottii*, EA 43. Infrequent. Planted in plantations, especially in the 1950s and 1960s, and also in yards and towns.

Pinus glabra Walter, A793. Infrequent. Bottomland forest.

Pinus palustris Mill., A1192. Infrequent. Pine forest of the eastern half of the county and high ridges of the Homochitto River basin.

Pinus taeda L., EA 204. Abundant. Almost everywhere except cultivated fields and in permanent water. Commonly cultivated in plantations.

MAGNOLIOPHYTA: LILIOPSIDA

AGAVACEAE

Manfreda virginica (L.) Salisb. ex Rose, L.C. Temple 9821 (MISS!). Infrequent. Pine forest and roadsides.

†*Yucca flaccida* Haw. [*Y. filamentosa* L. in part], WA&M 70997. Infrequent. Pine forest, particularly in the Homochitto River basin. Species taxonomy follows Trelease (1902).

ALISMATACEAE

Sagittaria latifolia Willd., A1459. Infrequent. Swamps, pond margins, and springs.

ALLIACEAE

**Allium ampeloprasum* L., A778. Rare. Perennially wet roadside ditches in full sun.

Allium canadense L. var. *canadense*, A817. Common. Roadsides and fields.

Nothoscordum bivalve (L.) Britton, A264. Abundant. Fields, roadsides, yards, and cemeteries.

**Nothoscordum gracile* (Aiton) Stearn, A2423. Rare. Gravelly ruderal areas in Liberty.

ALSTROEMERIACEAE

◆ **Alstroemeria psittacina* Lehm., A1919. Rare. Yard in Liberty.

AMARYLLIDACEAE

Hymenocallis caroliniana (L.) Herbert, EA 266. Infrequent. Bottomland hardwood forest.

**Narcissus jonquilla* L., A374. Infrequent. Persisting at old home sites and naturalizing into row crop fields.

ARACEAE

Arisaema dracontium (L.) Schott, A1004. Infrequent. Mesic hardwood forest.

Arisaema triphyllum (L.) Schott [including *A. quinatum* (Buckl.) Schott], A506. Common. Mesic forest, ravines, and occasionally pine forest.

Orontium aquaticum L., A533. Infrequent. Springs and sloughs.

ARECACEAE (see PALMAE)

BROMELIACEAE

Tillandsia usneoides (L.) L., A1391. Infrequent. Epiphyte on various trees and shrubs in mesic and lowland forest, and on *Quercus* spp. in upland forest or in yards.

COMMELINACEAE

**Commelina diffusa* Burm.f., A1362. Infrequent. Sandy margins of rivers.

Commelina virginica L., A1361. Infrequent. Sandy margins of rivers.

Tradescantia hirsutiflora Bush, A741. Rare. Mixed pine-hardwood upland forest and roadside ditches in the Homochitto River basin.

Tradescantia ohiensis Raf., A1889. Locally common. Roadside ditches and yards.

CONVALLARIACEAE

Polygonatum biflorum (Walter) Elliott, A2065. Infrequent. Upland hardwood forest and ravines.

CYPERACEAE

**Bulbostylis barbata* (Rottb.) C.B. Clarke, A2315. Rare. Cemetery in the southeastern corner of the county.

Bulbostylis capillaris (L.) Kunth ex C.B. Clarke, A2325. Locally common. Sandy pine forest and sandbars in the Homochitto River basin.

Carex abscondita Mack., A1012. Infrequent. Mature mixed forest.

- Carex albicans* var. *australis* (L.H. Bailey) Rettig [= *C. physorhyncha* Steud.], A366. Infrequent. Hardwood ravines and cemeteries.
- Carex albolutescens* Schwein., A906. Infrequent. Cypress swamps and spring-seeps.
- Carex atlantica* L.H. Bailey [including *C. atlantica* ssp. *capillacea* (L.H. Bailey) Reznicek], A909. Common. Spring-seeps and mesic ravines.
- Carex basiantha* Steud., A1013. Infrequent. Upland hardwood forest, ravines, and bottomland hardwood forest.
- Carex blanda* Dewey, A1998. Infrequent. Ravines and upland hardwood forest.
- Carex bromoides* var. *bromoides* Schkuhr ex Willd., A2005. Rare. Baldcypress swamp along the West Fork Amite River.
- Carex caroliniana* Schwein., A1032. Rare. Hardwood ravine.
- Carex cherokeensis* Schwein., A634. Infrequent. Thick loess and outcrops of clayey subsoil, primarily in the Homochitto River basin.
- Carex complanata* Torr. & Hook., A733. Common. Sandy bottomland, floodplains, clearcuts, and pine forest.
- Carex corrugata* Fernald [= *C. amphibola* var. *turgida* Fernald], WA&M 71147. Rare. Outcrops of clayey subsoil in longleaf pine forest of the Homochitto River basin.
- Carex crebriflora* Wiegand, A407. Common. Roadsides, upland and bottomland hardwood forest, and ravines.
- Carex debilis* Michx., A847. Abundant. Upland mixed forest, longleaf pine forest, outcrops of clayey subsoil in the Homochitto River basin, bottomland and associated mid-slopes, crevices of *Nyssa biflora* bark.
- Carex decomposita* Muhl., A1071. Rare. Cypress swamp in crevices and bark of *Taxodium distichum*.
- Carex digitalis* var. *asymmetrica* Fernald, A861. Common. Ravines, upland hardwood forest, bottomland hardwood forest, and roadside ditches.
- Carex festucacea* Schkuhr ex Willd., A735. Infrequent. Saffell outcrops and upland hardwood forest.
- Carex flaccosperma* Dewey, A696. Abundant. Bottomland forest, outcrops of clayey subsoil in the Homochitto River basin, and roadside ditches.
- Carex frankii* Kunth, A1054. Common. Bottomland openings, moist ditches in pine forest, upland loess, and oxbow lakes.
- Carex glaucescens* Elliott, A1779. Infrequent. Moist areas associated with pine forest.
- Carex intumescens* Rudge, A732. Locally common. Swamps, mesic hardwood ravines, and bottomland oak flats.
- Carex joorii* L.H. Bailey, A1611. Locally common. Bottomland hardwood forest and swamps.
- Carex leptalea* Wahlenb., A736. Locally common. Spring-seeps and associated swamps.
- Carex lonchocarpa* Willd., A2032. Infrequent. Stream banks and swamps, primarily in the southeastern part of the county.
- Carex longii* Mack., WA&M 71218. Common. Bottomland forest and mesic ravines.
- Carex louisianica* L.H. Bailey, A121. Rare. Old beaver-impounded pond.
- Carex lupulina* Muhl. ex Willd., A1445. Locally common. Riverbanks, swamp margins, and bottomland openings.
- Carex lurida* Wahlenb., A1286. Locally common. Spring-seeps, bottomland forest, and swamps.
- Carex muehlenbergii* Schkuhr ex Willd. var. *muehlenbergii*, A1148. Rare. Saffell outcrops.
- Carex nigromarginata* Schwein., A249. Rare. Mixed forest around rotting stumps.
- Carex rosea* Schkuhr ex Willd., A1011. Infrequent. Saffell outcrops and hardwood ravines.
- Carex striatula* Michx., A1033. Infrequent. Hardwood ravines and bottomland forest.
- Carex texensis* (Torr.) L.H. Bailey [= *C. retroflexa* var. *texensis* (Torr.) Fernald], A747. Common. Gravelly upland openings, yards, and alongside buildings.
- Carex tribuloides* Wahlenb., A1047. Common. Bottomland hardwood forest and Saffell outcrops.
- Carex vulpinoidea* Michx., WA&M 71055. Infrequent. Saffell outcrops and pine cutover.
- Cyperus compressus* L., A2421. Rare. Ruderal in Liberty.
- Cyperus echinatus* (L.) Wood, WA&M 70959. Infrequent. Pine forest.
- Cyperus erythrorhizos* Muhl., A2355. Infrequent. Sandy river margins.
- **Cyperus esculentus* L., A2332. Infrequent. Sandy river margins and cultivated fields.

- Cyperus haspan* L., A1020. Infrequent. Roadside ditches and pond margins.
- **Cyperus iria* L., WA&M 71065. Infrequent. Roadside ditches.
- Cyperus polystachyos* Rottb., A2359. Infrequent. Sandy river margins.
- Cyperus pseudovegetus* Steud., A1021. Common. Moist ditches.
- Cyperus retrorsus* Chapm., EA 123. Common. Old fields, pine forest, yards, and roadsides.
- **Cyperus rotundus* L., A556. Locally common. Cultivated fields.
- Cyperus strigosus* L., A1710. Common. Bottomland edges, ditches, and riversides.
- Cyperus virens* Michx., WA&M 71174. Common. Pond margins and ditches in pine forest.
- Eleocharis baldwinii* (Torr.) Chapm., A1929. Infrequent. Pond margins.
- Eleocharis microcarpa* Torr., A1187. Rare. Wet ditches in pine forest.
- Eleocharis obtusa* (Willd.) Schult., A1346. Common. Pond margins, swamps, and roadside ditches.
- Eleocharis tuberculosa* (Michx.) Roem. & Schult., A1762. Infrequent. Ditches in longleaf pine forest of the Homochitto River basin.
- Fimbristylis autumnalis* (L.) Roem. & Schult., A2243. Infrequent. Bald-cypress swamp of the Homochitto River and pond margins.
- Fimbristylis decipiens* Kral, A2422. Rare. Ruderal in Liberty.
- Fimbristylis dichotoma* (L.) Vahl, A2401. Infrequent. Ditches in pine forest of the Homochitto River basin.
- †**Fimbristylis miliacea* (L.) Vahl [as commonly used in the U.S.; or *F. littoralis* Gaud.], A1519. Common. Moist areas in pine forest and sandy river margins. See Strong & Kral (1999) for a discussion of the nomenclatural difficulties associated with this taxon.
- Fimbristylis tomentosa* Vahl, A1520. Infrequent. Moist areas in pine forest and roadside ditches.
- Isolepis carinata* Hook. & Arn. ex Torr. [= *Scirpus koilolepis* (Steud.) Gleason], A734. Locally common. Moist open areas.
- **Kyllinga brevifolia* Rottb., A2420. Infrequent. Ruderal areas in towns.
- **Kyllinga odorata* Vahl, A1783. Infrequent. Yards.
- Kyllinga pumila* Michx., A2360. Infrequent. Sandy river margins.
- Rhynchospora caduca* Elliott, A1514. Abundant. Bottomland fields, swamp margins, spring-seeps, and roadside ditches.
- Rhynchospora chalarocephala* Fernald & Gale, S. Jones et al. 19951 (MISS!). Rare. Swamps.
- Rhynchospora corniculata* (Lam.) A. Gray, A2035. Infrequent. Perennially wet ditches and swamp margins.
- Rhynchospora globularis* (Chapm.) Small, WA&M 71210. Infrequent. Upland clearcuts in the southeastern part of the county.
- Rhynchospora glomerata* (L.) Vahl, WA&M 71226. Common. Bottomland fields and roadside ditches.
- Rhynchospora inexpansa* (Michx.) Vahl, WA&M 71200. Infrequent. Moist upland openings, such as old ditches in pine forest.
- Rhynchospora mixta* Britton, A617. Infrequent. Margins of dry, upland longleaf or mixed oak-pine forest.
- Rhynchospora recognita* (Gale) Kral [= *R. globularis* var. *recognita* Gale], A997. Common. Roadsides, fields, pine forest, and outcrops of clayey subsoil in the Homochitto River basin.
- Scirpus cyperinus* (L.) Kunth, A1317. Common. Roadside ditches, pond margins, swamp margins, and beaver impoundments.
- Scleria ciliata* Michx., A444. Infrequent. Longleaf pine forest.
- Scleria oligantha* Michx., A905. Common. Upland and bottomland hardwood forest, swamps, outcrops of clayey subsoil, and pine forest.
- Scleria pauciflora* Muhl. ex Willd. var. *pauciflora*, A886. Infrequent. Cemeteries.
- Scleria triglomerata* Michx., WA&M 71134. Infrequent. Pine forest.

DIOSCOREACEAE

- Dioscorea quaternata* Walter ex J.F. Gmel., A1669. Infrequent. Mesic hardwood forest and rich ravines.
- Dioscorea villosa* L., A2107. Infrequent. Saffell outcrops.

GRAMINEAE

- Agrostis hyemalis* (Walter) B.S.P., A1930. Common. Pine forest, roadsides, and fields.
- Agrostis perennans* (Walter) Tuck., A1596. Infrequent. Swamp margins, moist roadsides, and Saffell outcrops.
- Alopecurus carolinianus* Walter, A2446. Infrequent. Pond margins and cattle pasture.

- Andropogon glomeratus* var. *pumilus* Vasey ex Dewey, A1691. Common. Clearcuts and old fields.
- Andropogon gyrans* Ashe var. *gyrans*, Ray 5471 (MISSA; specimen not seen). Cited in Campbell (1983). Now reportedly extirpated from MS (Kartesz 1999).
- Andropogon ternarius* Michx. var. *ternarius*, A1650. Infrequent. Pine forest.
- Andropogon virginicus* L. var. *virginicus*, A1627. Abundant. Old fields, pine forest, clearcuts, and roadsides.
- Aristida dichotoma* Michx. var. *dichotoma*, A1788. Infrequent. Pine forest.
- Aristida longespica* Poir. var. *longespica*, A1787. Common. Pine forest.
- Aristida oligantha* Michx., A2801. Infrequent. Pine forest and roadsides.
- Aristida purpurascens* Poir. var. *purpurascens*, A1804. Abundant. Pine forest.
- **Arthraxon hispidus* (Thunb.) Makino, A2328. Rare. Sandy margins of the Homochitto River.
- Arundinaria gigantea* (Walter) Muhl. ssp. *gigantea*, A978. Common. Bottomland forest, ravines, and upland hardwood and mixed forest.
- **Avena sativa* L., A855. Infrequent. Old fields.
- Axonopus fissifolius* (Raddi) Kuhl., A2446. Infrequent. Fields and yards.
- **Briza minor* L., EA 242. Common. Yards, old fields, and disturbed areas in town.
- **Bromus catharticus* Vahl, A722. Infrequent. Disturbed areas, clearcuts, and roadsides.
- **Bromus commutatus* Schrad., A856. Abundant. Pastures, fields, and roadsides.
- Chasmanthium latifolium* (Michx.) H.O. Yates, A1366. Locally common. Riversides and roadside ditches.
- Chasmanthium laxum* (L.) H.O. Yates, A1337. Infrequent. Forest of all sorts.
- Chasmanthium sessiliflorum* (Poir.) H.O. Yates, A1680. Abundant. Upland hardwood and mixed forest, ravines, and less commonly pine forest.
- **Cynodon dactylon* (L.) Pers., A854. Abundant. Pastures, old fields, yards, roadsides, and riversides.
- **Dactylis glomerata* L., A1173. Infrequent. Roadsides and disturbed gravelly areas.
- Danthonia sericea* Nutt., A667. Common. Roadsides.
- **Digitaria ciliaris* (Retz.) Koeler, A1441. Common. Riversides and bottomland edges.
- Digitaria ischaemum* (Schreb.) Muhl. var. *ischaemum*, A1599. Common. Yards and roadsides.
- **Echinochloa colona* (L.) Link, A1405. Common. Old fields, pastures, and pine forest.
- Echinochloa muricata* var. *microstachya* Wiegand, A2335. Rare. Sandbars of the Homochitto River.
- **Eleusine indica* (L.) Gaertn., A2424. Infrequent. Ruderal areas in towns.
- Elymus virginicus* L., A916. Abundant. Bottomland open areas, roadside ditches, and riversides.
- Eragrostis capillaris* (L.) Nees, A2805. Infrequent. Pine forest and roadsides.
- Eragrostis elliotii* S. Watson, A1625. Common. Pine forest, roadsides, and ditches.
- Eragrostis hirsuta* (Michx.) Nees, A2331. Infrequent. Sandy river margins and associated pine forest.
- Eragrostis hypnoides* (Lam.) B.S.P., A2829. Infrequent. Pond margins.
- Eragrostis refracta* (Muhl.) Scribn., A2284. Common. Pine forest and rarely old fields.
- Eragrostis spectabilis* (Pursh) Steud., A1546. Abundant. Pine forest, old fields, and roadsides.
- **Eremochloa ophiuroides* (Munro) Hack., A1524. Common. Yards, fields, roadsides, and cemeteries.
- Hordeum pusillum* Nutt., A726. Common. Old fields and pastures.
- Leersia lenticularis* Michx., A1307. Rare. Baldcypress swamp margins.
- Leersia oryzoides* (L.) Sw., A1794. Infrequent. Riversides.
- Leersia virginica* Willd., A1727. Common. Moist bottomland forest, swamps, and spring-seeps.
- Lolium arundinaceum* (Schreb.) Darbysh. [= *Festuca arundinacea* Schreb.], A2013. Infrequent. Roadsides and farms, particularly in the northeastern part of the county.
- **Lolium perenne* L., A583. Abundant. Fields and roadsides.
- Melica mutica* Walter, A674. Locally common. Saffell outcrops, gravelly forest, and bottomland roadsides.
- Muhlenbergia schreberi* J.F. Gmel., A2834. Infrequent. Roadside ditches and bottomland fields.

- Oplismenus hirtellus* ssp. *setarius* (Lam.) Mez ex Ekman [= *O. setarius* (Lam.) Roem. & Schult.], A1464. Infrequent. Bottomland forest, swamps, spring-seeps, and shaded yards.
- Panicum*: Taxonomy follows Lelong (1986). Recognition of *Dichanthelium* without *Phanopyrum* will require the transfer of numerous intermediates to other genera, or recognition of *Dichanthelium* with *Phanopyrum* will require transfer of *Dichanthelium* to *Phanopyrum* (the older name) or conservation (cf. Zuloaga et al. [1993] and phylogenetic reanalysis [Alford, unpubl. data]).
- †*Panicum aciculare* Desv. ex Poir. [= *Dichanthelium aciculare* (Desv. ex Poir.) Gould & C.A. Clark, in part], A1426. Abundant. Pine forest and cemeteries.
- †*Panicum acuminatum* Sw. var. *acuminatum* (sensu Lelong) [= *P. lanuginosum* Elliott, *Dichanthelium acuminatum* (Sw.) Gould & C.A. Clark, in part], A1756. Abundant. Pine forest, clearcuts, and roadsides.
- †*Panicum acuminatum* var. *fasciculatum* (Torr.) Lelong [= *Dichanthelium acuminatum* var. *fasciculatum* (Torr.) Freckmann], A1979. Infrequent. Clearcuts.
- †*Panicum acuminatum* var. *lindheimeri* (Nash) Lelong [= *Dichanthelium acuminatum* var. *lindheimeri* (Nash) Gould & C.A. Clark], WA&M 71220. Infrequent. Clearcuts.
- †*Panicum acuminatum* var. *unciphyllum* (Trin.) Lelong [= *Dichanthelium meridionale* (Ashe) Freckmann], WA&M 70869. Common. Clearcuts, pine forest, sandy bottomland, and gravelly areas.
- Panicum anceps* Michx. [including *P. anceps* var. *rhizomatum* (Hitchc. & Chase) Fernald], A1198. Common. Roadside ditches and pine forest.
- †*Panicum angustifolium* Elliott [= *Dichanthelium aciculare* (Desv. ex Poir.) Gould & C.A. Clarke, in part], A2022. Infrequent. Burned pine forest.
- †*Panicum boscii* Poir. [= *Dichanthelium boscii* (Poir.) Gould & C.A. Clarke], A1985. Common. Upland hardwood and mixed forest and ravines.
- †*Panicum commutatum* Schult. var. *commutatum* [= *Dichanthelium commutatum* (Schult.) Gould, in part], WA&M 71057. Infrequent. Pine forest.
- †*Panicum dichotomum* var. *ramulosum* (Torr.) Lelong [= *Dichanthelium dichotomum* L. var. *dichotomum*, in part], A1610. Common. Bottomland hardwood forest and low-water swamps.
- †*Panicum gymnocarpon* Elliott [= *Phanopyrum gymnocarpon* (Elliott) Nash], A1822. Locally common. Old river beds and swamp margins.
- †*Panicum hians* Elliott [= *Steinchisma hians* (Elliott) Nash], A2061. Locally common. Swamp margins and pond margins.
- †*Panicum laxiflorum* Lam. [= *Dichanthelium laxiflorum* (Lam.) Gould, *P. xalapense* Kunth], A1064. Common. Upland pine forest, bottomland edge, and cemeteries.
- †*Panicum polyanthes* Schult. [= *Dichanthelium sphaerocarpon* var. *isophyllum* (Scribn.) Gould & C.A. Clark], A969. Infrequent. Mixed forest.
- †*Panicum ravenelii* Scribn. & Merr. [= *Dichanthelium ravenelii* (Scribn. & Merr.) Gould], A450. Rare. Outcrops of clayey subsoil in longleaf pine forest of the Homochitto River basin.
- Panicum rigidulum* Bosc ex Nees, A1598. Locally common. Bottomland forest edges, spring-seeps, swamp margins, and roadside ditches.
- †*Panicum scoparium* Lam. [= *Dichanthelium scoparium* (Lam.) Gould], A1600. Common. Pine forest and roadsides.
- †*Panicum sphaerocarpon* Elliott [= *Dichanthelium sphaerocarpon* (Elliott) Gould, in part], A812. Locally common. Pine forest and clearcuts.
- †*Panicum strigosum* Muhl. ex Elliott var. *strigosum* [= *Dichanthelium strigosum* (Muhl. ex Elliott) Freckmann var. *strigosum*], A1428. Rare. Loblolly and shortleaf pine forest.
- †*Panicum tenue* Muhl. [= *Dichanthelium dichotomum* var. *tenue* (Muhl.) Gould & C.A. Clark], A449. Rare. Outcrops of clayey subsoil in longleaf pine forest of the Homochitto River basin.
- Panicum verrucosum* Muhl., A1597. Common. Roadside ditches and pond margins.
- Panicum virgatum* L. var. *virgatum*, A1545. Common. Old fields and roadsides.
- Paspalum boscianum* Flügge, A1614. Infrequent. Roadside ditches.
- **Paspalum dilatatum* Poir., A962. Abundant. Pastures, old fields, roadsides, and yards.

- Paspalum floridanum* Michx., A1748. Infrequent. Pine forest and roadsides.
- Paspalum laeve* Michx., A1655. Infrequent. Pine forest in the southeastern part of the county.
- **Paspalum notatum* var. *saurae* Parodi, A939. Abundant. Pastures, old fields, disturbed areas in town, and yards.
- Paspalum plicatulum* Michx., WA&M 71132. Rare. Pine forest of the Homochitto River basin.
- Paspalum setaceum* Michx., A957. Infrequent. Pine forest of the Homochitto River basin.
- **Paspalum urvillei* Steud., A938. Common. Roadsides and old fields.
- **Phalaris angusta* Nees ex Trin., A860. Rare. Roadside ditches.
- Phalaris caroliniana* Walter, A584. Infrequent. Roadsides and old fields.
- **Phyllostachys aurea* Carrière ex Rivière & C. Rivière, A1224. Infrequent. Bottomlands in the southwestern part of the county and persisting around old homes.
- Piptochaetium avenaceum* (L.) Parodi [= *Stipa avenacea* L.], A1897. Rare. Steep ravine of the Homochitto River basin.
- **Poa annua* L., A210. Locally common. Yards, disturbed areas in town, and fields.
- Poa autumnalis* Muhl. ex Elliott, A275. Common. Bottomland forest, upland hardwood and mixed forest, Saffell outcrops, and yards.
- Saccharum baldwinii* Spreng. [= *Erianthus strictus* Elliott], A1475. Infrequent. Bottomland edges and riversides.
- Saccharum brevibarbe* var. *contortum* (Elliott) R.D. Webster [= *S. contortum* (Elliott) Nutt., *Erianthus contortus* Baldwin ex Elliott], A1648. Common. Bottomland openings, clear-cuts, and roadsides.
- Saccharum giganteum* (Walter) Pers. [= *Erianthus giganteus* (Walter) P. Beauv.], A1664. Infrequent. Pond margins and ditches in pine forest.
- Sacciolepis striata* (L.) Nash, A2358. Rare. Sandy margin of the West Fork Amite River.
- Schizachyrium scoparium* (Michx.) Nash, A1626. Abundant. Pine forest, clearcuts, and roadsides.
- **Setaria glauca* (L.) P. Beauv., A1404. Common. Pastures, old fields, and moist roadsides.
- Setaria parviflora* (Poir.) Kerguelen [= *S. geniculata* P. Beauv.], A1647. Rare. Xeric roadsides.
- Sorghastrum elliottii* (C. Mohr) Nash, A2389. Infrequent. Pine forest.
- **Sorghum halepense* (L.) Pers., A1117. Common. Roadsides.
- Sphenopholis filiformis* (Chapm.) Hitchc., A2550. Rare. Cemetery in the eastern half of the county.
- Sphenopholis obtusata* (Michx.) Scribn., A587. Infrequent. Roadsides, pastures, and disturbed areas in town.
- **Sporobolus indicus* (L.) R. Br., A1732. Common. Fields, pastures, yards, and disturbed areas in town.
- Sporobolus junceus* (P. Beauv.) Kunth, A1645. Infrequent. Pine forest in the eastern part of the county.
- **Stenotaphrum secundatum* (Walter) Kuntze, EA 265. Common. Lawns and fields.
- Tridens flavus* (L.) Hitchc., A1484. Common. Roadsides and fields.
- Tripsacum dactyloides* (L.) L., A1227. Infrequent. Roadside ditches, riverbanks, and pine forest.
- **Triticum aestivum* L., A835. Infrequent. Fields and food plots.
- Urochloa platyphylla* (Munro ex C. Wright) R. D. Webster [= *Brachiaria platyphylla* (Munro ex C. Wright) Nash], A1215. Infrequent. Cultivated fields.
- **Vulpia myuros* (L.) C. C. Gmel., A721. Common. Disturbed areas and roadsides.
- Vulpia octoflora* (Walter) Rydb. var. *octoflora*, A664. Infrequent. Roadsides.

HEMEROCALLIDACEAE

- **Hemerocallis fulva* (L.) L., A814. Infrequent. Roadsides and old home sites.

HYACINTHACEAE

- **Muscari neglectum* Guss. ex Ten., A376. Rare. Fallow soybean fields.

HYDROCHARITACEAE

- Vallisneria americana* Michx., A337. Locally common. In channel and margins of both forks of the Amite River and its tributaries, occasionally in spring-fed streams.

HYPOXIDACEAE

- Hypoxis hirsuta* (L.) Coville, A2021. Infrequent. Pine forest, primarily those that are occasionally burned, in the Homochitto River basin and

in the southeastern corner of the county, rarely along sandy stream margins of the Homochitto River basin.

IRIDACEAE

**Gladiolus* × *gandavensis* Van Houtte, A689. Infrequent. Roadside ditches.

**Gladiolus communis* ssp. *byzantinus* (Mill.) A.P.Ham., A529. Rare. Old house sites.

Iris brevicaulis Raf., A790. Rare. Edges of bottomland hardwood forest along the East Fork Amite River.

**Iris pseudacoris* L., A537. Infrequent. Perennially wet ditches and shallow abandoned ponds.

Sisyrinchium angustifolium Mill., A911. Common. Pine forest, midslope mixed forest, and ungrazed pasture land.

*†*Sisyrinchium exile* E.P. Bicknell (*S. rosulatum* E.P. Bicknell, in part), A556. Infrequent. Roadsides and pastures. Species taxonomy follows Shinnars (1962).

Sisyrinchium mucronatum Michx., A1880. Rare. Pine forest in the eastern half of the county.

Sisyrinchium rosulatum E.P. Bicknell, A631. Common. Roadsides and pastures.

JUNCACEAE

Juncus acuminatus Michx., A895. Infrequent. Bottomland fields and openings.

Juncus biflorus Elliott, A638. Locally common. Open moist areas and roadside ditches.

Juncus brachycarpus Engelm., WA&M 70996. Rare. Open swamp.

Juncus bufonius L., A1948. Rare. Bottomland hardwood forest.

Juncus coriaceus Mack., A1446. Locally common. Open swamps, roadside ditches, riverbanks, moist fields, and hardwood forest.

Juncus diffusissimus Buckley, A913. Common. Open swampy areas, roadside ditches, and moist bottomland fields.

Juncus effusus L., A620. Locally common. Swamps, roadside ditches, and moist fields.

Juncus marginatus Rostk., WA&M 71161. Infrequent. Moist openings.

Juncus repens Michx., A1923. Infrequent. Pond margins and perennially wet ditches.

Juncus tenuis Willd., A699. Abundant. Roadside ditches, forest edges, old woods roads, clearcuts, and swamps.

Juncus validus Coville, A1022. Locally common. Open swamps and roadside ditches.

Luzula acuminata var. *carolinae* (S.Watson) Fernald, A2522. Rare. Steep gravelly bluff overlooking the East Fork Amite River.

Luzula bulbosa (Wood) Smyth and L. Smyth, A297. Infrequent. Roadsides in town.

Luzula echinata (Small) F.J.Herm., A277. Common. Saffell outcrops, mature hardwood forest, bottomland hardwood forest, and yards.

LEMNACEAE

Lemna aequinoctialis Welw., A1351. Infrequent. Stagnant ditches, small streams, beaver-impounded ponds, and sloughs.

Lemna valdiviana Philippi, A2581. Rare. Slough of the East Fork Amite River.

LILIACEAE

Chamaelirium luteum (L.) A. Gray. Infrequent. Upland hardwood forest.

Lilium michauxii Poir., A2018. Infrequent. Upland hardwood forest.

MELANTHIACEAE

Aletris aurea Walter, A1095. Infrequent. Longleaf pine forest, especially ridge outcrops of clayey subsoil in the Homochitto River basin.

Melanthium virginicum L., A1298. Rare. Spring-seep in the Homochitto River basin.

ORCHIDACEAE

Epidendrum conopseum W.T. Aiton, A1369. Infrequent. Epiphytic on *Magnolia grandiflora* along rivers, especially in the East Fork Amite River drainage.

Listera australis Lindl., A423. Rare. Bottomland hardwood forest along West Fork Amite River.

Malaxis unifolia Michx., A845. Rare. Mesic upland hardwood forest.

Platanthera ciliaris (L.) Lindl., A41. Rare. Moist hardwood drains between longleaf pine dominated ridges of the Homochitto River drainage.

Platanthera flava (L.) Lindl. var. *flava*, A1328. Infrequent. Spring-seeps and low-water swamps.

Spiranthes cernua (L.) Rich., A60. Rare. Spring-seep and low-water swamp of the West Fork Amite River.

Spiranthes ovalis Lindl., A1668. Rare. Mesic hardwood ravine.

Spiranthes praecox (Walter) S.Watson, A1941. Infrequent. Pine forest.

Spiranthes tuberosa Raf., A1191. Infrequent. Cemeteries and yards.

Spiranthes vernalis Engelm. & A.Gray, A2079. Common. Fields, yards, roadsides, and cemeteries.

Tipularia discolor (Pursh) Nutt., A1388. Infrequent. Upland hardwood forest.

PALMAE

Sabal minor (Jacq.) Pers., A1211. Infrequent. Spring-seeps, bottomland hardwood forest, and swamp margins.

POACEAE (see GRAMINEAE)

POTAMOGETONACEAE

Potamogeton diversifolius Raf., A2294. Infrequent. Tributaries and open spring-fed waters in the Amite River drainage.

Potamogeton pulcher Tuck., A2582. Rare. Open slough of the East Fork Amite River.

SMILACACEAE

Smilax bona-nox L., A889. Common. Upland forest, secondary forest, and Saffell outcrops.

Smilax glauca Walter, A1920. Abundant. Pine forest and roadsides.

Smilax laurifolia L., A1839. Locally common. Swamps, swamp margins, and bottomland hardwood forest.

Smilax pulverulenta Michx., A2537. Infrequent. Upland hardwood forest.

Smilax pumila Walter, A1638. Locally common. Saffell outcrops and unburned longleaf pine forest in the Homochitto River basin and southeastern corner of county.

Smilax rotundifolia L., A2044. Abundant. Forest of all sorts.

Smilax smallii Morong, A1829. Abundant. Forest of all sorts.

Smilax tamnoides L., A1162. Abundant. Upland forest, secondary forest, bottomland forest, and Saffell outcrops.

Smilax walteri Pursh, A1840. Infrequent. Swamps.

SPARGANIACEAE

Sparganium americanum Nutt., A2027. Infrequent. Swamps, marshes, impoundments of water near forest, and perennially-wet roadside ditches.

TRILLIACEAE

Trillium foetidissimum J.D. Freeman, A300. Infrequent. Bottomland hardwood forest and occasionally in rich ravines.

TYPHACEAE

Typha latifolia L., A881. Infrequent. Roadside ditches and pond margins.

UVULARIACEAE

Uvularia perfoliata L., A1885. Infrequent. Mature hardwood forest and steep ravines.

XYRIDACEAE

**Xyris jupicai* Rich., A1657. Rare. Old farm ponds in southeastern corner of county.

Xyris laxifolia var. *iridifolia* (Chapm.) Kral [= *X. iridifolia* Chapm.], A1297. Infrequent. Spring-seeps, *Nyssa* swamps, and perennially-wet ditches in full sun.

MAGNOLIOPHYTA: MAGNOLIOPSIDA

ACANTHACEAE

Hygrophila lacustris (Schltdl. & Cham.) Nees, A1109. Infrequent. Riverbank sand and gravel, often submerged.

Justicia ovata var. *lanceolata* (Chapm.) R.W.Long, A768. Locally common. Riverbank sand and gravel, pond margins, and swamp margins.

Ruellia caroliniensis (J.F.Gmel.) Steud. var. *caroliniensis*, A920. Common. Fields, open bottomland, and roadsides.

ACERACEAE

Acer barbatum Michx., A2115. Infrequent. Mature hardwood or mixed forest, primarily in the Homochitto River basin.

Acer negundo L., A395. Common. River-banks and sandy bottomland forest.

Acer rubrum L. var. *rubrum*, A259. Abundant. Forest of all sorts.

Acer rubrum L. var. *drummondii* (Hook. & Arn. ex Nutt.) Sarg., A1076. Infrequent. Swamps and bottomland, particularly along the Homochitto River.

Acer saccharinum L., A2025. Rare. Bottomland forest in the southeastern corner of the county.

ADOXACEAE

†*Sambucus canadensis* L. [= *S. nigra* ssp. *canadensis* Bolli], A792. Abundant. Mesic

roadsides, fencerows, and edges of bottomland forest. Rank is arbitrary here, and I choose to maintain the historical usage.

Viburnum nudum L., A569. Locally common. Swamps.

Viburnum rufidulum Raf., A433. Infrequent. Saffell outcrops and ravines.

†*Viburnum scabrellum* Torr. & A. Gray ex Chapm. [= *V. dentatum* var. *scabrellum* Torr. & A. Gray], A576. Common. Upland forest, ravines, and Saffell outcrops. Species taxonomy follows McAtee (1956).

AMARANTHACEAE

**Alternanthera philoxeroides* (Mart.) Griseb., A795. Infrequent. Bottomland fields and roadside ditches.

**Amaranthus spinosus* L., A1220. Infrequent. Pastures and cultivated fields.

ANACARDIACEAE

Rhus copallinum L., A1739. Abundant. Pine forest, secondary forest, fencerows, and roadsides.

Rhus glabra L., A941. Infrequent. Pine forest, fencerows, and roadsides.

Toxicodendron radicans (L.) Kuntze, A1126. Abundant. Widespread, but especially common in secondary forest and unburned pine or upland hardwood forest.

Toxicodendron pubescens Mill. [= *T. toxicarium* Gillis, = *T. quercifolium* (Michx.) Greene], A1185. Infrequent. Pine forest, primarily in the southeastern part of the county.

Toxicodendron vernix (L.) Kuntze, A1105. Rare. Swamp along the East Fork Amite River.

ANNONACEAE

Asimina triloba (L.) Dunal, EA 54. Infrequent. Bottomland hardwood forest and Saffell outcrops.

APIACEAE (see UMBELLIFERAE)

APOCYNACEAE

Trachelospermum difforme (Walter) A. Gray, A717. Infrequent. Sandy bottomland forest, upland pine forest, and upland forest edges.

**Vinca major* L., A357. Infrequent. Roadsides and around old homes.

AQUIFOLIACEAE

Ilex ambigua (Michx.) Torr., A1390. Infrequent. Mature hardwood forest of Saffell outcrops.

Ilex coriacea (Pursh) Chapm., A1116. Infrequent. Swamps in the East Fork Amite River drainage.

Ilex decidua Walter, A412. Common. Various forest and forest edges.

Ilex longipes Chapm. ex Trel., A439. Common. Mid-slope or upland mature forest.

Ilex opaca Aiton, A538. Common. Mature forest.

Ilex verticillata (L.) A. Gray, A510. Locally common. Swamps, margins of beaver-impounded ponds, and bottomland forest.

Ilex vomitoria Aiton, A437. Common. Upland forest, roadsides, and fencerows.

ARALIACEAE

Aralia spinosa L., A1552. Infrequent. Upland pine forest and roadsides.

**Hedera helix* L., A1230. Infrequent. Old home sites.

ARISTOLOCHIACEAE

Aristolochia serpentaria L., A2082. Infrequent. Saffell outcrops, ravines, bluffs, and mature hardwood forest.

Hexastylis arifolia (Michx.) Small var. *arifolia* [= *Asarum arifolium* Michx.], A1886. Infrequent. Mature bottomland hardwood forest.

ASCLEPIADACEAE

Asclepias amplexicaulis Sm., WA&M 70994. Infrequent. Pine forest.

Asclepias longifolia Michx., A1938. Rare. Pine forest.

Asclepias perennis Walter, A1006. Rare. Old dry oxbow lake with baldcypress in the Homochitto River drainage.

Asclepias tuberosa L., A688. Common. Pine forest and roadsides.

Asclepias variegata L., A591. Common. Forest of all sorts.

Asclepias verticillata L., WA&M 70866. Rare. Pine forest in the southeastern part of the county.

Asclepias viridiflora Raf., A1281. Infrequent. Longleaf pine forest and ridges of the Homochitto River basin.

Asclepias viridis Walter, A565. Infrequent. Longleaf pine forest and ridges of the Homochitto River basin.

Matelea carolinensis (Jacq.) Woodson, A952. Infrequent. Rich ravines and Saffell outcrops.

Matelea gonocarpos (Walter) Shinnars, A972. Infrequent. Upland hardwood forest and open ravines.

ASTERACEAE (see **COMPOSITAE**)**BALSAMINACEAE**

Impatiens capensis Meerb., A650. Infrequent.
Floodplains and riverbanks.

BERBERIDACEAE

**Nandina domestica* Thunb., A1678. Infrequent.
Commonly planted and sparingly naturalizing to all kinds of forest.
Podophyllum peltatum L., A338. Infrequent. Mid-slope hardwood forest and ravines.

BETULACEAE

Betula nigra L., A2506. Locally common.
Riverbanks and pond margins.
Carpinus caroliniana Walter ssp. *caroliniana*, WA&M 70905. Abundant. Bottomland forest, ravines, and mature forest of various sorts.
Ostrya virginiana (Mill.) K. Koch, A1994. Common. Mature forest, bottomland forest, ravines, and Saffell outcrops.

BIGNONIACEAE

Bignonia capreolata L., A512. Abundant. Forest, forest edges, and dense fencerows.
Campsis radicans (L.) Seem. ex Bureau, A852. Abundant. Forest edges and fencerows.
Catalpa bignonioides Walter, A796. Infrequent. Old fields, fencerows, and persisting from cultivation at homes and ponds. Possibly non-native.

BORAGINACEAE

Cynoglossum virginianum L. var. *virginianum*, A1001. Rare. Upland mature forest of the Homochitto River basin.
**Heliotropium indicum* L., EA 184. Infrequent. Ruderal areas in towns.
Lithospermum tuberosum Rugel ex DC., A1174. Infrequent. Saffell outcrops.
Myosotis macrosperma Engelm., A492. Infrequent. Mesic semi-openings and yards.

BRASSICACEAE (see **CRUCIFERAE**)**BUDDLEJACEAE**

Polypremum procumbens L., A832. Abundant. Pine forest, clearcut areas, road-sides, and disturbed sites.

BUXACEAE

Pachysandra procumbens Michx., A2574. Infrequent. Mixed upland forest in the Homochitto

River basin and hardwood forest of Saffell outcrops in the Amite River drainage.

CABOMBACEAE

Brasenia schreberi J.F.Gmel., WA&M 71089. Infrequent. Beaver impounded ponds and old impoundments of various sorts.

CALLITRICHACEAE

Callitriche heterophylla Pursh, A2433. Infrequent. Ponds and beaver-impoundments.
Callitriche peploides Nutt. var. *pepoides*, A2557. Rare. Cleared forest in the northeastern part of the county.

CAMPANULACEAE

Lobelia appendiculata A.DC., A874. Pine forest, upland open areas, and gravelly bottomland woods roads.
Lobelia cardinalis L. var. *cardinalis*, A70. Common. Bottomland openings and riverbanks.
Lobelia puberula Michx., A1633. Abundant. Roadsides.
Triodanis biflora (Ruiz & Pav.) Greene, A365. Common. Roadsides, ruderal areas in towns, and yards.
Triodanis perfoliata (L.) Nieuwl., A500. Infrequent. Bottomland semi-open areas and yards.
**Wahlenbergia marginata* (Thunb.) A.DC., A718. Roadsides and gravelly disturbed areas.

CAPPARACEAE

**Cleome hassleriana* Chodat, WA&M 70900. Infrequent. Riverbanks and sandbars.

CAPRIFOLIACEAE

**Lonicera japonica* Thunb., A478. Abundant. Secondary forest, roadsides, and fencerows.
Lonicera sempervirens L. var. *sempervirens*, A434. Infrequent. Forest edges.

CARYOPHYLLACEAE

Arenaria lanuginosa (Michx.) Rohrb., A713. Infrequent. Saffell outcrops.
**Cerastium glomeratum* Thuill., A266. Abundant. Roadsides, fields, ruderal areas in towns, and yards.
Sagina decumbens (Elliott) Torr. & A.Gray, A369. Infrequent. Old fields, yards, and ruderal areas in towns.
Silene antirrhina L., A2553. Infrequent. Roadsides and farms in the eastern half of the county.
Silene stellata (L.) W.T.Aiton, A1131. Infrequent. Saffell outcrops.

**Stellaria media* (L.) Vill., A285. Abundant. Old fields, roadsides, ruderal areas in towns, and yards.

CELASTRACEAE

Euonymus americanus L., A1702. Infrequent. Upland hardwood forest.

**Euonymus fortunei* (Turcz.) Hand.-Mazz., A2800. Rare. Long-persisting after cultivation.

Lepuropetalon spathulatum Muhl. ex Elliott, A1872. Infrequent. Cemeteries.

CHENOPODIACEAE

**Chenopodium ambrosioides* L., A2354. Infrequent. Sandy river margins.

CISTACEAE

Helianthemum carolinianum (Walter) Michx., A320. Infrequent. Pine forest and cemeteries.

Lechea mucronata Raf., A1636. Infrequent. Pine forest, clearcuts, and roadsides, especially in the eastern half of the county.

Lechea tenuifolia Michx., A2010. Infrequent. Roadsides and pine forest in the eastern half of the county.

CLUSIACEAE (see GUTTIFERAE)

COMPOSITAE

Acmella oppositifolia var. *repens* (Walter) R.K. Jansen [= *Spilanthes americana* var. *repens* (Walter) A.H. Moore], EA 31. Infrequent. Riversides and sandy bottomland.

Ageratina aromatica (L.) Spach, A1715. Infrequent. Pine forest.

Ambrosia artemisiifolia L., EA 61. Abundant. Old fields, clearcuts, and roadsides.

Ambrosia trifida L., A1708. Common. Roadside ditches.

Antennaria plantaginifolia (L.) Richardson, A382. Infrequent. Gravelly roadsides, roadside banks, and upland pine forest.

Antennaria solitaria Rydb., A1894. Rare. Steep ravines of the Homochitto River basin.

**Anthemis cotula* L., A819. Infrequent. Cattle farms and old fields.

Arnoglossum plantagineum Raf., A2041. Infrequent. Swamps and spring-seeps.

Baccharis halimifolia L., EA 137. Common. Pine forest.

Bidens aristosa (Michx.) Britton [including *B. polylepis* S.F. Blake], A1586. Common. Roadside ditches.

Bidens bipinnata L., A2349. Rare. Roadside.

Bidens discoidea (Torr. & A. Gray) Britton, A2250. Infrequent. Swamps.

Boltonia asteroides (L.) L'Hér., A1442. Infrequent. Roadsides and sandy river margins.

Boltonia diffusa Elliott, A1273. Common. Pine forest and roadsides.

Chromolaena ivifolia (L.) King & H. Robins. [= *Eupatorium ivifolium* L.], A2808. Infrequent. Open roadsides.

Chrysopsis mariana (L.) Elliott, A1635. Abundant. Upland pine forest, old fields, and roadsides.

Chrysopsis pilosa Nutt., A1294. Infrequent. Upland pine forest, particularly in the Homochitto River basin.

Cirsium altissimum (L.) Spreng., A1673. Infrequent. Upland forest edges and gravelly clearcuts.

Cirsium carolinianum (Walter) Fernald & B.G. Schub., A1939. Infrequent. Pine forest, especially in the Homochitto River basin and in the southeastern part of the county.

Cirsium horridulum Michx., A794. Abundant. Old fields, roadsides, and forest edges.

Cirsium nuttallii DC., A1324. Infrequent. Upland pine forest and gravelly areas.

**Cirsium vulgare* (Savi) Ten., A830. Infrequent. Clearcuts.

Conoclinium coelestinum (L.) DC. [= *Eupatorium coelestinum* L.], EA 33. Abundant. Old fields and roadsides.

Conyza canadensis (L.) Cronquist, A1290. Infrequent. Upland pine forest and roadsides.

†*Conyza parva* Cronquist [= *C. canadensis* var. *pusilla* (Nutt.) Cronquist], A1728. Common. Moist roadsides. Species taxonomy follows Cronquist (1980).

Coreopsis lanceolata L., A441. Common. Roadsides and upland forest edges.

Coreopsis pubescens Elliott var. *pubescens*, A806. Infrequent. Roadsides and upland forest edges.

**Coreopsis tinctoria* Nutt. var. *tinctoria*, A1019. Infrequent. Pine forest, especially of the Homochitto River basin.

Coreopsis tripteris L., A1539. Infrequent. Pine forest, clearcuts, and roadsides.

Eclipta prostrata (L.) L., A1535. Infrequent. Old fields and lawns.

Elephantopus carolinianus Raeusch., A1454. Locally common. Bottomland hardwood forest.

- Elephantopus tomentosus* L., A1329. Common. Upland hardwood and mixed forest.
- Erigeron annuus* (L.) Pers., A936. Infrequent. Clearcuts, old fields, and roadsides.
- Erigeron philadelphicus* L., A228. Common. Roadsides, yards, upland hardwood forest, and Saffell outcrops.
- Erigeron strigosus* var. *beyrichii* (Fisch. & C.A. Mey.) Torr. & A. Gray ex A. Gray, A598. Abundant. Roadsides and fields.
- Erigeron tenuis* Torr. & A. Gray, A224. Infrequent. Wooded yards.
- Eupatorium album* L., A1283. Infrequent. Pine forest and upland mixed forest.
- Eupatorium capillifolium* (Lam.) Small, EA 132. Abundant. Old fields, upland forest edges, and roadsides.
- Eupatorium hyssopifolium* L., A2279. Infrequent. Pine forest.
- Eupatorium perfoliatum* L., A1605. Infrequent. Old fields, forest margins, and roadsides.
- Eupatorium* × *pinnatifidum* Elliott, EA 107. Abundant. Clearcuts, roadsides, and pine forest.
- Eupatorium rotundifolium* L. var. *rotundifolium*, A1275. Common. Pine forest.
- Eupatorium semiserratum* DC., A1661. Common. Pine forest edges, secondary forest edges, and old fields.
- Eupatorium serotinum* Michx., A1688. Abundant. Roadsides and clearcuts.
- Eurybia hemispherica* (Alexander) Nesom [= *Aster hemisphaericus* Alexander, *Aster paludosus* ssp. *hemisphericus* (Alexander) Cronquist], A1407. Common. Roadsides and upland pine forest.
- Euthamia leptcephala* (Torr. & A. Gray) Greene, A1660. Common. Pine forest, forest edges, and old fields.
- **Facelis retusa* (Lam.) Sch. Bip., A800. Infrequent. Roadsides and old fields.
- Fleischmannia incarnata* (Walter) R.M. King & H. Rob. [= *Eupatorium incarnatum* Walter], A76. Rare. Saffell outcrops.
- Gamochaeta americana* (Mill.) Wedd. [= *Gnaphalium americanum* Mill.], A554. Common. Fields and yards.
- Gamochaeta falcata* (Lam.) Cabrera [= *Gnaphalium falcatum* Lam.], A2556. Infrequent. Fields and roadsides.
- Gamochaeta pensylvanica* (Willd.) Cabrera [= *Gnaphalium pensylvanicum* Willd.], A2393. Common. Roadsides, clearcuts, and sandy fields.
- Gamochaeta purpurea* (L.) Cabrera [= *Gnaphalium purpureum* L.], A599. Abundant. Roadsides, clearcuts, yards, and disturbed forest margins.
- Helenium amarum* (Raf.) H. Rock, A744. Abundant. Old fields, cattle farms, roadsides, and disturbed areas in towns.
- Helenium flexuosum* Raf., A1107. Common. Old fields, upland pine forest, and roadsides.
- Helianthus angustifolius* L., A1603. Abundant. Pine forest and roadsides.
- Helianthus atrorubens* L., EA 109. Rare. Upland roadsides.
- Helianthus divaricatus* L., A1197. Common. Upland pine forest, especially in the Homochitto River basin.
- Helianthus microcephalus* Torr. & A. Gray, EA 35. Common. Old fields and roadsides.
- Helianthus resinosus* Small, A1408. Infrequent. Pine forest and roadsides, especially in the eastern half of the county.
- Helianthus strumosus* L., A1266. Infrequent. Pine forest and roadsides.
- Heliopsis helianthoides* var. *gracilis* (Nutt.) Gandhi & R.D. Thomas, A1147. Rare. Saffell outcrops.
- †*Heterotheca subaxillaris* var. *latifolia* (Buckley) Gandhi & R.D. Thomas, A1397. Infrequent. Roadsides and gravelly areas. Intraspecific taxonomy follows Gandhi & Thomas (1989).
- Hieracium gronovii* L., A1713. Infrequent. Hardwood ravines, cemeteries, and pine forest.
- Ionactis linariifolius* (L.) Greene [= *Aster linariifolius* L.], A111. Locally common. Outcrops of clayey subsoil in longleaf pine forest of the Homochitto River basin.
- Iva annua* L., A1746. Rare. Upland pine forest of the Homochitto River basin.
- Krigia cespitosa* (Raf.) K.L. Chambers, A207. Infrequent. Fields and yards.
- Krigia dandelion* (L.) Nutt., A370. Infrequent. Yards, disturbed areas in town, and bottomland fields.
- Krigia virginica* (L.) Willd., A627. Infrequent. Edges of pine forest and outcrops of clayey subsoil in the Homochitto River basin.

- Lactuca canadensis* L., A1106. Common. Roadsides and old fields.
- Lactuca floridana* (L.) Gaertn., A1394. Common. Roadsides and gravelly areas.
- Lactuca graminifolia* Michx., A1285. Infrequent. Longleaf pine forest of the Homochitto River basin.
- **Leucanthemum vulgare* Lam., A851. Rare. Roadsides.
- Liatris elegans* (Walter) Michx., EA 5. Rare. Outcrops of clayey subsoil in longleaf pine forest of the Homochitto River basin.
- Liatris pycnostachya* Michx., A1264. Locally common. Upland pine forest, clearcuts, and roadsides, especially in the Homochitto River basin.
- Liatris squarrosa* (L.) Michx., A1249. Locally common. Upland pine forest, clearcuts, and roadsides, especially in the Homochitto River basin.
- Liatris squarrosa* Michx. [= *L. earlei* (Greene) K. Schum.], A1631. Common. Pine forest and roadsides, especially in the southeastern part of the county.
- Mikania cordifolia* (L.f.) Willd., A1718. Infrequent. Ravines of the Homochitto River basin and Saffell outcrops.
- Mikania scandens* (L.) Willd., A1460. Common. Bottomland openings.
- Packera anonyma* (Wood) W.A. Weber & Á. Löve [= *Senecio anonymus* Wood], A590. Locally common. Roadsides of the eastern one-third of the county.
- Packera glabella* (Poir.) C. Jeffrey [= *Senecio glabellus* Poir.], A308. Locally common. Moist fields, margins of beaver impoundments, streamsides, and bottomland hardwood forest.
- Pityopsis graminifolia* (Michx.) Nutt., EA 139. Abundant. Upland pine forest, old fields, and gravelly areas.
- Pluchea camphorata* (L.) DC., A1518. Infrequent. Bottomland hardwood forest and swamp margins.
- Pluchea foetida* (L.) DC., A2267. Infrequent. Moist ditches in pine forest.
- Prenanthes altissima* L., A990. Infrequent. Ravines of the Homochitto River basin.
- Pseudognaphalium helleri* (Britton) Anderb., W. Allison 481 (MISS!). Rare.
- Pseudognaphalium obtusifolium* (L.) Hilliard & B.L. Burt [=*Gnaphalium obtusifolium* L.], EA 74. Common. Old fields.
- Pyrrhopappus carolinianus* (Walter) DC., A653. Abundant. Roadsides and forest edges.
- Rudbeckia hirta* L., A600. Abundant. Roadsides, old fields, and upland forest edges.
- Smallanthus uvedalius* (L.) Mack. ex Small [= *Polymnia uvedalia* (L.) L.], A698. Infrequent. Upland mixed forest, Saffell outcrops, and forest edges.
- ◆ *Solidago auriculata* Shuttlew. ex S.F. Blake, A1670. Rare. Mature hardwood ravine near center of county.
- Solidago caesia* L., A1606. Common. Mesic hardwood forest.
- Solidago canadensis* L., EA 113. Abundant. Old fields, clearcuts, and roadsides.
- Solidago discoidea* Elliott [= *Brintonia discoidea* (Elliott) Greene], A1706. Infrequent. Bottomland forest and swamps.
- Solidago gigantea* Aiton, A1325. Common. Old fields.
- Solidago hispida* Muhl. ex Willd., A1685. Infrequent. Clearcuts and roadsides.
- Solidago odora* Aiton var. *odora*, A1274. Common. Pine forest and old fields.
- Solidago patula* Muhl. ex Willd., A2407. Infrequent. Swamps and spring-seeps.
- Solidago rugosa* Mill. [including var. *celtidifolia* (Small) Fernald], A1683. Abundant. Pine forest, margins of other forest, roadsides, and clearcuts.
- Solidago ulmifolia* Muhl. ex Willd., A1559. Infrequent. Saffell outcrops.
- **Soliva sessilis* Ruiz & Pav. [= *S. pterosperma* (Juss.) Less.], A857. Infrequent. Old fields and yards.
- **Sonchus asper* (L.) Hill, A310. Infrequent. Around buildings in towns and on farms.
- Symphotrichum adnatum* (Nutt.) Nesom [= *Aster adnatus* Nutt.], A112. Locally common. Outcrops of clayey subsoil in longleaf pine forest of the Homochitto River basin.
- Symphotrichum concolor* (L.) Nesom [= *Aster concolor* L.], A2395. Infrequent. Pine forest of the Homochitto River basin.
- Symphotrichum drummondii* var. *texanum* (Burgess) Nesom [= *Aster drummondii* var. *texanus* (Burgess) A.G. Jones], A682. Infrequent. Saffell outcrops.

Symphyotrichum dumosum (L.) Nesom [=*Aster dumosus* L.], A1744. Abundant. Roadsides and pine forest.

Symphyotrichum lateriflorum (L.) Á. Löve & D. Löve [=*Aster lateriflorus* (L.) Britton], A1643. Infrequent. Open pine forest, clearcuts, roadsides, and bottomland forest edges.

Symphyotrichum patens var. *gracile* (Hook.) Nexom [=*Aster patens* var. *gracilis* Hook.], A642. Rare. Outcrops of clayey subsoil in longleaf pine forest of the Homochitto River basin.

Symphyotrichum patens (Aiton) Nesom var. *patens* [=*Aster patens* Aiton var. *patens*], A1687. Common. Roadsides, clearcuts, and pine forest.

Symphyotrichum praealtum (Poir.) Nesom [=*Aster praealtus* Poir.], A106. Infrequent. Old fields and pine forest.

Symphyotrichum undulatum (L.) Nesom [=*Aster undulatus* L.], A1771. Infrequent. Upland pine or mixed forest.

**Taraxacum officinale* Weber ex F.H. Wigg., A225. Common. Old fields, yards, and disturbed areas in towns.

Verbesina virginica L., A1491. Infrequent. Roadside ditches in the southeastern part of the county.

Verbesina walteri Shinnery, A1449. Locally common. Bottomland forest and ditches.

Vernonia gigantea (Walter) Trel. ssp. *gigantea*, EA 122. Common. Mesic openings and forest edges.

Vernonia texana (A. Gray) Small, A1256. Common. Upland pine forest and roadsides.

**Xanthium strumarium* L., A1206. Infrequent. Sandy stream margins.

**Youngia japonica* (L.) DC., A273. Infrequent. Yards and disturbed areas in towns.

CONVOLVULACEAE

Dichondra carolinensis Michx., EA 208. Common. Old fields and yards.

Ipomoea cordatotriloba Dennst., A578. Common. Roadsides.

Ipomoea hederacea Jacq., A2814. Infrequent. Roadsides and fields.

◆ **Ipomoea indica* (Burm.f.) Merr., EA 17. Rare. Ditches in Liberty.

Ipomoea lacunosa L., A1538. Infrequent. Old fields and cultivated areas.

Ipomoea pandurata (L.) G. Mey., A752. Abundant. Roadsides and pine forest.

Ipomoea quamoclit L., EA 3. Infrequent. Roadsides and fencerows.

Jacquemontia tamnifolia (L.) Griseb., A1104. Abundant. Old fields, roadsides, fencerows, and forest edges.

Stylisma humistrata (Walter) Chapm., A1094. Infrequent. Pine forest, especially in the Homochitto River basin.

CORNACEAE

Cornus florida L., A1869. Abundant. Forest of all sorts.

Nyssa biflora Walter, A1348. Locally common. Swamps, margins of beaver impoundments, and occasionally in typical bottomland forest.

Nyssa sylvatica Marshall, A1396. Common. Upland forest of various sorts, old fields, fencerows, and occasionally bottomland forest.

CRUCIFERAE

**Brassica rapa* L., A377. Infrequent. Old fields and persisting in gardens.

Cardamine bulbosa (Schreb. ex Muhl.) B.S.P., EA 217. Infrequent. Bottomland hardwood forest, moist semi-open forest, and Saffell outcrops.

**Cardamine hirsuta* L., A280. Common. Fields, yards, and ruderal areas in towns.

Lepidium virginicum L., A787. Common. Pastures, roadsides, and ruderal areas in towns.

**Raphanus raphanistrum* L., A309. Common. Old fields and roadsides, especially in the eastern half of the county.

Rorippa sessiliflora (Nutt. ex Torr. & A. Gray) Hitchc., A2500. Infrequent. Riverside gravel in the Amite River drainage.

**Sisymbrium officinale* (L.) Scop., A2552. Infrequent. Roadsides and farms in the eastern half of the county.

CUCURBITACEAE

Cayaponia quinqueloba (Raf.) Shinnery, A1481. Rare. Bottomland roadside in the southeastern part of the county.

**Cucumis melo* L., EA 255. Infrequent. Bottomland fields.

Melothria pendula L., S. Jones et al. 19957 (MISS!). Rare. Cultivated fields.

CUSCUTACEAE

Cuscuta compacta Juss. ex Choisy var. *compacta*, A2470. Rare. Parasitic on roadside herbs.

Cuscuta cuspidata Engelm., A1466. Infrequent. Parasitic on bottomland field herbs or riverbank herbs, especially in the southeastern part of the county.

Cuscuta pentagona Engelm., A973. Common. Parasitic on roadside and clearcut-area herbs.

DROSERACEAE

Drosera brevifolia Pursh, A448. Rare. Outcrops of clayey subsoil in long-leaf pine forest of the Homochitto River basin.

EBENACEAE

Diospyros virginiana L., WA&M 70894. Abundant. Pine forest, mixed forest, roadsides, and old fields.

ERICACEAE

Gaylussacia dumosa (Andrews) Torr. & A. Gray var. *dumosa*, A2097. Infrequent. Pine forest in the southeastern part of the county.

Kalmia latifolia L., A422. Rare. Ravines in the Buffalo River drainage of the western part of the county. Apparently native, as referenced by a local biologist (R. Richardson, pers. comm.), but suspiciously close to John James Audubon Arboretum in Gloster. If not originally extending this far west, the species has definitely naturalized along certain streams.

Leucothoe racemosa (L.) A. Gray, A2039. Infrequent. Swamps in the south-central and southeastern part of the county.

Lyonia ligustrina (L.) DC., A2417. Rare. Swamp in the southeastern part of the county.

Oxydendrum arboreum (L.) DC., A754. Common. Pine forest and upland mixed or hardwood forest.

Rhododendron canescens (Michx.) Sweet, A387. Locally common. Bottomland forest, especially along streams, swamp margins, and rarely in pine forest.

Vaccinium arboreum Marshall [= *Batodendron arboreum* (Marshall) Nutt.], A546. Common. Mature pine forest and upland mixed or hardwood forest.

Vaccinium elliottii Chapm., A614. Abundant. Pine forest and upland mixed forest.

Vaccinium fuscatum Aiton, A1039. Infrequent. Pine and mixed forest.

Vaccinium stamineum L. [= *Polycodium stamineum* (L.) Greene], A528. Common. Pine and upland mixed forest.

EUPHORBIACEAE

Acalypha gracilens A. Gray, A842. Common. Pine forest, gravelly areas, and roadsides.

Acalypha rhomboidea Raf., A1785. Infrequent. Ruderal areas in towns and yards.

Acalypha virginica L., A1412. Rare. Roadsides in the northeastern part of county.

Chamaesyce hyssopifolia (L.) Small, A1326. Infrequent. Old railroad tracks and ruderal areas in towns.

Chamaesyce maculata (L.) Small, A1319. Pine forest, roadsides, ruderal areas in towns, and yards.

Chamaesyce nutans (Lag.) Small, A1353. Infrequent. Roadsides and ruderal areas in towns.

Croton capitatus Michx., A1278. Common. Old fields, clearcut areas, cultivated areas, and roadsides.

Croton glandulosus var. *septentrionalis* Müll. Arg., A2322. Rare. Sandy margin of the Homochitto River.

Euphorbia corollata L., A658. Abundant. Roadsides, pine forest, and clearcuts.

Euphorbia cyathophora Murr, A2365. Infrequent. Roadsides.

Phyllanthus caroliniensis Walter ssp. *caroliniensis*, A1444. Infrequent. Roadsides.

**Phyllanthus urinaria* L., A2850. Infrequent. Ruderal areas in towns.

Tragia cordata Michx., A1146. Rare. Saffell outcrops.

Tragia smallii Shinnery, A2096. Infrequent. Pine forest in the southeastern part of the county.

**Triadica sebifera* (L.) Small [= *Sapium sebiferum* (L.) Roxb.], A1528. Common. Riverbanks, fencerows, old fields, and secondary forest.

**Vernicia fordii* (Hemsl.) Airy Shaw [= *Aleurites fordii* Hemsl.], A1865. Common. Pine forest, secondary woods, and roadsides, especially in the eastern half of the county.

FABACEAE (see LEGUMINOSAE)**FAGACEAE**

Castanea pumila (L.) Mill. var. *pumila* [in the broad

- sense, sensu Johnson (1988)], EA 32. Infrequent. Pine forest and Saffell outcrops.
- Fagus grandifolia* Ehrh., A1942. Abundant. Primarily in bottomland hardwood forest, ravines, and mature hardwood forest, but also in pine forest and secondary forest.
- Quercus alba* L., EA 152. Abundant. Primarily in upland hardwood or mixed forest, but also in bottomland forest.
- Quercus* × *comptoniae* Sarg. [= *Q. lyrata* Walter × *Q. virginiana* Mill.], A1259. Infrequent. Upland forest in the southwestern corner of the county.
- Quercus coccinea* Münchh., A1133. Infrequent. Saffell outcrops.
- Quercus falcata* Michx., EA 247. Abundant. Upland forest, primarily associated with pine.
- Quercus hemisphaerica* W. Bartram ex Willd., A625. Locally common. Ridges and mid-slope of ravines in the Homochitto River basin.
- Quercus incana* W. Bartram, A1765. Infrequent. Outcrops of clayey subsoil in longleaf pine forest of the Homochitto River basin.
- Quercus laurifolia* Michx., A1402. Common. Bottomland hardwood forest and swamps.
- Quercus lyrata* Walter, A2366. Infrequent. Swamps and bottomland forest.
- Quercus marilandica* Münchh., A1766. Locally common. Upland forest, primarily associated with pine; most common on ridges of the Homochitto River basin and in the eastern half of the county.
- Quercus michauxii* Nutt., A1554. Common. Bottomland hardwood forest and ravines.
- Quercus muhlenbergii* Engelm., A971. Rare. Mature hardwood forest in ravines.
- Quercus nigra* L., A2373. Abundant. Bottomland hardwood forest, upland forest of all types, roadsides, and yards.
- Quercus pagoda* Raf., A2372. Abundant. Bottomland hardwood forest and ravines.
- Quercus phellos* L., A2367. Infrequent. Upland flats, bottomland, and yards.
- Quercus rubra* L., A1682. Rare. Ravines.
- Quercus shumardii* Buckley, A1005. Infrequent. Upland hardwood or mixed forest, ravines, and Saffell outcrops.
- Quercus stellata* Wangenh., EA 248. Locally common. Upland forest, primarily associated with

pine, and yards; most common in the eastern half of the county.

Quercus velutina Lam., A977. Common. Upland hardwood and mixed forest and Saffell outcrops.

Quercus virginiana Mill., EA 38. Rare. Upland roadsides in southwestern corner of county.

FUMARIACEAE

Corydalis micrantha ssp. *australis* (Chapm.) G.B. Ownbey, A404. Infrequent. Gravelly roadsides and rarely rich hardwood forest in the southeastern part of the county.

GELSEMIACEAE

Gelsemium rankinii Small, EA 182. Infrequent. Swamps.

Gelsemium sempervirens (L.) J. St.-Hil., EA 231. Common. Fencerows, pine forest, and forest edges.

GENTIANACEAE

Gentiana villosa L., EA 89. Infrequent. Pine forest.

Sabatia angularis (L.) Pursh, Webster & Wilbur 3277 (DUKE!, MICH!). Infrequent. Pine forest and forest edges.

Sabatia brachiata Elliott, A1175. Infrequent. Pine forest and roadsides.

Sabatia campestris Nutt., A1182. Rare. Pine forest in the southeastern corner of the county.

GERANIACEAE

Geranium carolinianum L., A282. Common. Old fields, disturbed areas in towns, and yards.

**Geranium dissectum* L., S. Jones & C. Jones 4120 (MISS). Rare. Roadsides.

GUTTIFERAE

Hypericum crux-andreae (L.) Crantz, A1497. Infrequent. Pine forest in the southeastern part of the county.

Hypericum drummondii (Grev. & Hook.) Torr. & A. Gray, A1293. Common. Pine forest and Saffell outcrops.

Hypericum gentianoides (L.) B.S.P., A2324. Infrequent. Sandy pine forest.

Hypericum gymnanthum Engelm. & A. Gray, A823. Rare. Pine forest and clearcuts in the southeastern part of the county.

Hypericum hypericoides (L.) Crantz, A1248. Common. Pine forest.

Hypericum mutilum L., A824. Common. Pine for-

est and clearcuts, particularly in the southeastern part of the county.

Hypericum nudiflorum Michx. ex Willd., WA&M 71017. Infrequent. Stream banks and swamps.

Triadenum walteri (J.G. Gmel.) Gleason, A1457. Infrequent. Swamps, spring-seeps, and bottomland hardwood forest.

HALORAGACEAE

**Myriophyllum aquaticum* (Vell.) Verdc., A798. Infrequent. Slow-moving streams.

Proserpinaca palustris var. *amblyogona* Fernald, S. Jones et al. 13944 (MISS!). Infrequent. Pond margins.

Proserpinaca palustris var. *crebra* Fernald & Griscom, WA&M 70918. Infrequent. Moist ditches of bottomland hardwood forest.

HAMAMELIDACEAE

Hamamelis virginiana L., A871. Common. Upland hardwood and mixed forest.

Liquidambar styraciflua L., A1851. Abundant. Hardwood ravines, bottomland hardwood forest, secondary succession, and pine forest.

HIPPOCASTANACEAE

Aesculus pavia L., A1899. Infrequent. Mature upland hardwood forest, especially at Saffell outcrops, creekbanks, and pine forest.

HYDRANGEACEAE

Decumaria barbara L., A785. Infrequent. Bottomland hardwood forest.

Hydrangea arborescens L., S. Jones et al. 13930 (MISS!). Rare. Steep ravines and bottomland hardwood forest along the East Fork Amite River.

Hydrangea quercifolia W. Bartram, A873. Infrequent. Ravines and Saffell outcrops.

HYDROPHYLLACEAE

Hydrolea uniflora Raf., WA&M 71091. Rare. Beaver-impounded ponds in the Homochitto River basin.

HYPERICACEAE (see GUTTIFERAE)

ILLICIACEAE

Illicium floridanum J. Ellis, A1884. Locally common. Bottomland hardwood forest, primarily in the Amite and Tickfaw River basins, but at least one population in the Homochitto River basin.

ITEACEAE

Itea virginica L., A570. Locally common. Spring-seeps and swamps.

JUGLANDACEAE

Carya aquatica (F. Michx.) Nutt., A1065. Infrequent. Sandy bottomland hardwood forest, primarily in the Homochitto River basin.

Carya cordiformis (Wangenh.) K. Koch, A1679. Rare. Ravines of mature hardwood forest.

Carya glabra (Mill.) Sweet, A1900. Common. Upland hardwood or mixed forest.

Carya illinoensis (Wangenh.) K. Koch, A1529. Common. Old fields, fencerows, and house sites.

Carya pallida (Ashe) Engl. & Graebn., A1260. Common. Upland hardwood, mixed, or pine forest.

†*Carya tomentosa* (Poir.) Nutt. [= *C. alba* (L.) Nutt. ex Elliott], A1432. Abundant. Upland hardwood or mixed forest, pine forest, secondary forest, and roadsides. Nomenclature follows D. Stone (1997).

**Juglans nigra* L., A1247. Infrequent. Fields and yards. Probably all introductions from elsewhere in eastern North America.

LABIATAE

◆ **Clinopodium gracile* (Benth.) Kuntze, A782. Rare. Bottomland hardwood forest of the East Fork Amite River.

Collinsonia tuberosa Michx., A1697. Infrequent. Upland gravelly hardwood forest.

**Glechoma hederacea* L., A482. Infrequent. Shady yards, towns, and cemeteries.

Hedeoma hispida Pursh, A729. Infrequent. Clearcuts, disturbed fields, upland forest edges, and roadsides.

Hyptis alata (Raf.) Shinn. Rare. Referenced in Jones (1976); specimen not seen.

**Lamium amplexicaule* L., A223. Common. Yards, towns, roadsides, and fields.

**Lamium purpureum* L., A265. Infrequent. Yards and towns.

Lycopus rubellus Moench, A1590. Infrequent. Swamp margins and roadside ditches.

Lycopus virginicus L., A1452. Common. Bottomland openings, roadside ditches, spring-seeps, and riverbanks.

Monarda fistulosa var. *mollis* (L.) Benth., A820. Infrequent. Upland pine forest and forest edges.

Monarda punctata L. var. *punctata*, A1413. Infrequent. Pine forest and roadsides.

**Perilla frutescens* (L.) Britton, A1676. Infrequent. Disturbed areas, secondary pine forest, and secondary bottomland forest.

**Prunella vulgaris* L., A581. Infrequent. Yards, fencerows, towns, and occasionally along forest edges.

Pycnanthemum albescens Torr. & A. Gray, A1284. Infrequent. Upland pine forest, especially in the Homochitto River basin.

Pycnanthemum tenuifolium Schrad., EA 87. Abundant. Pine forest and roadsides.

Salvia lyrata L., A426. Common. Forest of various sorts and yards.

Scutellaria elliptica Muhl. ex Spreng., A764. Infrequent. Saffell outcrops and upland hardwood forest.

Scutellaria incana Biehler, A1496. Rare. Pine forest in the southeastern part of the county.

Scutellaria integrifolia L., A574. Abundant. Forest of various sorts, forest edges, and roadsides.

Stachys floridana Shuttlew. ex Benth., A481. Rare. Yards in Liberty.

Stachys tenuifolia Willd., A1458. Rare. Bottomland hardwood forest and spring-seeps.

Teucrium canadense L., WA&M 70906. Rare. Sandy bank of the West Fork Amite River.

Trichostema dichotomum L., A1602. Common. Pine forest, sandy riverbanks, and roadside ditches.

Trichostema setaceum Houtt., A1639. Infrequent. Pine forest in the southeastern part of the county and in the Homochitto National Forest.

LAMIACEAE (see LABIATAE)

LAURACEAE

Lindera benzoin (L.) Blume, EA 30. Locally common. Sandy bottomland hardwood forest in the Homochitto River basin and infrequently in the Amite River basin.

Persea palustris (Raf.) Sarg., EA 36. Infrequent. Bottomland hardwood forest, mid-slope mixed forest, and ravines.

Sassafras albidum (Nutt.) Nees, A1140. Abundant. Roadsides, fencerows, and hardwood forest.

LEGUMINOSAE

Albizia julibrissin Durazz., A943. Common. Roadsides, fencerows, and yards.

**Alysicarpus vaginalis* (L.) DC., A2837. Infrequent. Roadsides.

Apios americana Medik., EA 165. Infrequent. Bottomland forest edges, swamp margins, and riversides.

Baptisia alba var. *macrophylla* (Larisey) Isely [= *B. lactea* (Raf.) Thieret, = *B. leucantha* Torr. & A. Gray], A579. Infrequent. Old fields and pine forest.

Centrosema virginianum (L.) Benth., A756. Abundant. Upland forest edges and roadsides.

Cercis canadensis L., A267. Infrequent. Upland hardwood forest, Saffell outcrops, and commonly cultivated.

Chamaecrista fasciculata (Michx.) Greene, A1303. Common. Roadsides and old fields.

Chamaecrista nictitans (L.) Moench var. *nictitans*, A1561. Infrequent. Roadsides.

Clitoria mariana L., A1252. Abundant. Pine forest, forest edges, and roadsides.

Crotalaria rotundifolia Walter ex J.F. Gmel., A549. Rare. Pine forest.

Crotalaria sagittalis L., A608. Locally common. Pine forest, especially in the Homochitto River basin.

**Crotalaria spectabilis* Roth, C. Brown 18686 (LSU!). Rare. Roadsides. Herbarium label indicates Wilkinson Co., MS, but the locality data ("north of Coles") indicate Amite Co.

Desmodium canescens (L.) DC., A1515. Infrequent. Roadsides.

Desmodium ciliare (Muhl. ex Willd.) DC., A2275. Infrequent. Pine forest.

Desmodium glutinosum (Muhl. ex Willd.) A.W. Wood, A1142. Infrequent. Mature hardwood forest over Saffell outcrops.

Desmodium laevigatum (Nutt.) DC., A1721. Infrequent. Upland forest edges.

Desmodium lineatum DC., EA 81. Common. Forest of various sorts, roadside ditches, and cemeteries.

Desmodium nudiflorum (L.) DC., A1145. Rare. Mature hardwood forest over Saffell outcrops.

Desmodium nuttallii (Schindl.) B.G. Schub., A2308. Rare. Burned pine forest.

Desmodium obtusum (Muhl. ex Willd.) DC., A1693. Common. Clearcuts, pine forest, and roadsides.

Desmodium paniculatum (L.) DC., A1720. Abundant. Pine forest, bottomland openings, old fields, and roadsides.

- Desmodium perplexum* B.G. Schub., A1619. Infrequent. Sandy bottomland river margins and roadside ditches.
- Desmodium rotundifolium* DC., A1813. Infrequent. Ravines of mixed forest and Saffell outcrops.
- Desmodium viridiflorum* (L.) DC., A2815. Infrequent. Upland pine forest and roadsides in the eastern half of the county.
- Erythrina herbacea* L., A573. Common. Forest edges, gravelly areas, and Saffell outcrops.
- Galactia erecta* (Walter) Vail, A2102. Rare. Pine forest in the southeastern part of the county.
- Galactia volubilis* (L.) Britton as interpreted by most authors [*G. regularis* (L.) B.S.P. sensu Duncan] [including *G. macreei* M.A. Curtis], A1301. Common. Forest edges.
- Gleditsia triacanthos* L., A1246. Infrequent. Upland roadsides and forest edges.
- Glottidium vesicarium* (Jacq.) R.M. Harper, A2412. Infrequent. Bottomland openings.
- Kummerowia striata* (Thunb.) Schindl. [= *Lespedeza striata* (Thunb.) Hook. & Arn.], A1722. Common. Upland pine forest.
- **Lathyrus hirsutus* L., A777. Infrequent. Roadsides, old fields, and cultivated fields.
- **Lespedeza cuneata* (Dum.Cours.) G. Don, EA 40. Common. Roadsides, old fields, and pine forest.
- Lespedeza hirta* (L.) Hornem. ssp. *hirta*, A1499. Common. Pine forest and old fields.
- Lespedeza procumbens* Michx., A622. Common. Upland forest edges, old fields, and roadsides.
- Lespedeza repens* (L.) W.P.C. Barton, A550. Abundant. Pine forest.
- Lespedeza violacea* (L.) Pers., A1723. Rare. Upland forest edges of the Homochitto River basin.
- Lespedeza virginica* (L.) Britton, A1745. Abundant. Pine forest, forest edges, and roadsides.
- **Medicago arabica* (L.) Huds., A361. Infrequent. Ruderal areas in towns.
- Medicago polymorpha* L. Referenced in Pullen et al. (1968); specimen not seen.
- Mimosa microphylla* Dryand. [= *Schrankia microphylla* (Dryand.) J.F. Macbr.], A593. Common. Pine forest and roadsides.
- Orbexilum pedunculatum* (Mill.) Rydb., A513. Rare. Pine forest of the southeastern part of the county.
- **Pueraria montana* (Lour.) Merr. [= *Pueraria lobata* (Willd.) Ohwi], A1371. Infrequent. Roadsides and adjacent forest.
- Rhynchosia reniformis* DC., A694. Infrequent. Outcrops of clayey subsoil in longleaf pine forest of the Homochitto River basin.
- Rhynchosia tomentosa* (L.) Hook. & Arn., A2098. Infrequent. Pine forest.
- Robinia pseudo-acacia* L., A536. Common. Upland forest edges and roadsides.
- Senna obtusifolia* (L.) H.S. Irwin & Barneby, A1236. Locally common. Cultivated fields.
- Sesbania herbacea* (Mill.) McVaugh [= *S. exaltata* (Raf.) Rydb. ex A.W. Hill?], A2351. Infrequent. Cultivated fields.
- Strophostyles helvula* (L.) Elliott, A2323. Rare. Sandy banks of the Homochitto River.
- Strophostyles umbellata* (Muhl. ex Willd.) Britton, A1493. Common. Pine forest.
- Stylosanthes biflora* (L.) B.S.P., A607. Common. Pine forest, especially in the Homochitto River basin.
- Tephrosia spicata* (Walter) Torr. & A. Gray, A646. Common. Pine forest.
- Tephrosia virginiana* (L.) Pers., A563. Locally common. Pine forest, especially dry open ridges and frequently burned areas.
- **Trifolium arvense* L., A474. Infrequent. Roadsides.
- **Trifolium campestre* Schreb., A585. Common. Roadsides, yards, and fields.
- Trifolium carolinianum* Michx., A1892. Rare. Edge of mature upland hardwood forest in the Homochitto River basin.
- Trifolium dubium* Sibth., A429. Common. Roadsides and yards.
- **Trifolium incarnatum* L., A330. Abundant. Roadsides and fields.
- **Trifolium repens* L., A552. Abundant. Roadsides, fields, and yards.
- **Trifolium resupinatum* L., A467. Infrequent. Roadsides and yards.
- **Vicia sativa* ssp. *nigra* (L.) Ehrh. [= *V. angustifolia* L.], A270. Common. Old fields, cultivated fields, and roadsides.
- **Vicia tetrasperma* (L.) Schreb., A484. Infrequent. Old fields.
- **Vicia villosa* Roth ssp. *villosa*, A472. Common. Roadsides, old fields, and cultivated fields.
- **Wisteria sinensis* (Sims) DC., A1879. Infrequent. Roadsides, secondary forest, and old home sites.

LENTIBULARIACEAE

†*Utricularia biflora* Lam. [= *U. gibba* L., in part], A2063. Infrequent. Beaver-impounded ponds and perennially-wet ditches. Species taxonomy follows Godfrey & Wooten (1981) and Weakley (in prep.).

LINACEAE

Linum medium var. *texanum* (Planch.) Fernald, A645. Abundant. Pine forest and roadsides.

Linum striatum Walter, A1044. Infrequent. Bottomland open areas and wet roadsides.

LOGANIACEAE

†*Cynoctonum mitreola* (L.) Britton [= *Mitreola petiolata* (J.F. Gmel.) Torr. & A. Gray], A2283. Infrequent. Bottomland openings. I do not consider the pirated *Opera Varia* (1758) of Linnaeus, and the generic name *Mitreola* taken within, validly published according to Art. 34.1 of the ICBN (St. Louis).

Spigelia marilandica (L.) L., A561. Infrequent. Ravines of mature hardwood forest and Saffell outcrops.

LYTHRACEAE

**Cuphea carthagenensis* (Jacq.) J.F. Macbr., A833. Common. Roadsides, clearcut areas, and sandy bottomland openings.

**Lagerstroemia indica* L., A1177. Infrequent. Fencerows and secondary forest.

Rotala ramosior (L.) Koehne, A2317. Rare. Swamp margins in the Homochitto River basin.

MAGNOLIACEAE

Liriodendron tulipifera L., A509. Abundant. Bottomland hardwood forest, mixed forest, ravines, and Saffell outcrops.

Magnolia acuminata (L.) L., A2105. Infrequent. Saffell outcrops and ravines, most common in the Homochitto River basin.

Magnolia grandiflora L., A714. Abundant. Bottomland hardwood forest, ravines, and occasionally upland hardwood or mixed forest.

Magnolia macrophylla Michx., A566. Locally common. Ravines of the Homochitto River basin.

Magnolia virginiana L., A687. Locally common. Swamps and perennially wet roadside areas.

MALVACEAE

Modiola caroliniana (L.) G. Don, A311. Infrequent. Disturbed areas in towns, yards, and roadsides.

Sida rhombifolia L., A1026. Common. Roadsides and bottomland openings.

MELASTOMATACEAE

Rhexia mariana L. var. *mariana*, A940. Common. Pond margins, margins of beaver impounded ponds, and roadside ditches.

Rhexia nashii Small × *R. virginica* L., A821. Infrequent. Swamp margins in the Homochitto River basin.

Rhexia virginica L., A1588. Infrequent. Roadside ditches.

MELIACEAE

**Melia azedarach* L., A557. Common. Mesic pine forest, mesic secondary forest, roadsides, and old home sites, more common in the eastern half of the county.

MENISPERMACEAE

Cocculus carolinus (L.) DC., A1134. Infrequent. Hardwood forest and Saffell outcrops.

MOLLUGINACEAE

**Mollugo verticillata* L., WA&M 71108. Common. Riverbanks and sandbars.

MONOTROPACEAE

Monotropa uniflora L., A1781. Rare. Sandy lower slopes of ravines in the Homochitto River basin.

MORACEAE

**Broussonetia papyrifera* (L.) L'Hér. ex Vent., EA 18. Infrequent. Disturbed areas in towns.

Morus rubra L., A436. Infrequent. Upland forest, Saffell outcrops, and yards.

MYRICACEAE

Morella cerifera (L.) Small [= *Myrica cerifera* L.], A220. Abundant. Pine forest, roadsides, various forest edges, and occasionally along swamp margins.

NELUMBONACEAE

Nelumbo lutea Willd., S. Jones et al. 19892 (GA!, MISS!). Rare. Pond in Liberty; apparently now extirpated.

NYCTAGINACEAE

**Mirabilis jalapa* L., A1511. Infrequent. Roadsides and around old homes in the southeastern part of the county.

NYMPHAEACEAE

Nuphar lutea ssp. *advena* (Aiton) Kartesz &

Gandhi [= *N. advena* (Aiton) W.T. Aiton], A511. Infrequent. Beaver-impounded ponds and stagnant sloughs.

**Nymphaea odorata* Aiton, A1170. Rare. Naturalizing in ponds from introductions from other parts of the state.

OLEACEAE

Fraxinus americana L., A915. Infrequent. Upland mixed forest.

Fraxinus pennsylvanica Marshall, A1077. Common. Bottomland hardwood forest and moist roadsides.

**Ligustrum lucidum* W.T. Aiton, A1096. Infrequent. Secondary pine forest, fencerows, and roadsides.

**Ligustrum sinense* Lour., A541. Abundant. Secondary pine forest, bottomland forest, forest edges, fencerows, and riverbanks.

Osmanthus americanus (L.) Benth. & Hook. f. ex A. Gray, A2415. Infrequent. Swamps in the southeastern part of the county.

ONAGRACEAE

Circaea lutetiana ssp. *canadensis* (L.) Asch. & Magnus, A767. Rare. Bottomland hardwood forest along the West Fork Amite River.

Gaura brachycarpa Small, S. Jones 5345 (MISS!). Rare. Roadside in the northeastern part of the county.

Ludwigia alternifolia L., A1344. Common. Roadside ditches, pond margins, riverbanks, and disturbed areas.

Ludwigia decurrens Walter, A1360. Infrequent. Riverbanks and pond margins.

Ludwigia glandulosa Walter ssp. *glandulosa*, A1780. Infrequent. Pond margins.

Ludwigia hirtella Raf., A1181. Rare. Longleaf pine forest.

Ludwigia leptocarpa (Nutt.) H. Hara, A1838. Rare. Pond margins.

Ludwigia linearis Walter, A1659. Rare. Pond margins in the southeastern part of the county.

Ludwigia palustris (L.) Elliott, WA&M 70920. Locally common. Pond margins, sloughs, open swamps, and river margins.

Ludwigia peploides ssp. *glabrescens* (Kuntze) P.H. Raven, A1097. Infrequent. Ponds and open stream margins.

Oenothera biennis L., A1410. Common. Roadsides and clearcuts.

Oenothera fruticosa L. ssp. *fruticosa*, A1975. Pine forest and clearcuts.

Oenothera laciniata Hill, A473. Common. Clearcuts, roadsides, towns, and yards.

Oenothera linifolia Nutt., A2095. Rare. Open pine forest in the southeastern part of the county.

**Oenothera speciosa* Nutt., A604. Locally common. Roadsides.

OROBANCHACEAE

Epifagus virginiana (L.) W.P.C. Barton, A97. Infrequent. Mature hardwood forest.

OXALIDACEAE

Oxalis corniculata L., A274. Infrequent. Pine forest, fields, and yards.

**Oxalis debilis* var. *corymbosa* (DC.) Lourteig, A2484. Infrequent. Roadsides, ruderal areas in towns, and yards.

Oxalis dillenii Jacq., A368. Abundant. Pine forest and Saffell outcrops.

**Oxalis rubra* A. St.-Hil., A2418. Infrequent. Towns and yards.

Oxalis violacea L., A390. Infrequent. Saffell outcrops and upland hardwood forest.

PASSIFLORACEAE

Passiflora incarnata L., A1270. Common. Clearcuts, roadsides, fencerows, and forest edges.

Passiflora lutea L., A1399. Infrequent. Mesic forest edges.

PENTHORACEAE

Penthorum sedoides L., A1365. Infrequent. Bottomland hardwood forest.

PHYTOLACCACEAE

Phytolacca americana L., A673. Common. Roadsides and pasture edges.

PLANTAGINACEAE

Plantago aristata Michx., A596. Common. Pine forest, roadsides, old fields, and disturbed areas in towns.

Plantago heterophylla Nutt., A1896. Rare. Cemeteries.

Plantago virginica L., A555. Common. Clearcuts, fields, roadsides, and cemeteries.

PLATANACEAE

Platanus occidentalis L., A1233. Common. River margins, bottomland hardwood forest, and occasionally cultivated.

POLEMONIACEAE

Phlox divaricata L., A204. Infrequent. Saffell outcrops and hardwood ravines.

Phlox pilosa L., A431. Infrequent. Pine forest and roadsides.

POLYGALACEAE

Polygala incarnata L., A758. Rare. Outcrops of clayey subsoil in longleaf pine forest of the Homochitto National Forest.

Polygala mariana Mill., A606. Common. Pine forest.

Polygala nana (Michx.) DC., A1935. Infrequent. Outcrops of clayey subsoil in longleaf pine forest of the Homochitto National Forest and pine forest of the southeastern part of the county.

Polygala verticillata L., A885. Rare. Cemetery in the southwestern part of the county.

POLYGONACEAE

Brunnichia ovata (Walter) Shinnery, A1400. Infrequent. Sandy river margins and associated forest.

**Polygonum caespitosum* var. *longisetum* (Bruyn) Steward, A701. Infrequent. Bottomland forest and woods roads.

Polygonum hydropiperoides Michx. [= *Persicaria hydropiperoides* (Michx.) Small], A805. Locally common. Swamp margins, moist bottomland fields and forest, roadsides, and woods roads.

Polygonum lapathifolium L., A2823. Rare. Pond margin in the eastern part of the county.

Polygonum pennsylvanicum L. [= *Persicaria pennsylvanica* (L.) M. Gómez, including *P. bicornis* Raf.], EA 66. Infrequent. Bottomland ditches and forest edges.

Polygonum punctatum Elliott [= *Persicaria punctata* (Elliott) Small], A1595. Locally common. Roadside ditches, swamp margins, river margins, and bottomland forest edges.

Polygonum scandens L. [= *Fallopia scandens* (L.) Holub], A1786. Infrequent. Moist roadside ditches.

Polygonum setaceum Baldwin [= *Persicaria setacea* (Baldwin) Small], A1069. Infrequent. Swamps and spring-seeps.

Polygonum virginianum L. [= *Persicaria virginiana* (L.) Gaertn., *Antenoron virginianum* (L.) Roberty & Vautier, *Tovara virginiana* (L.) Raf.],

A1308. Infrequent. Upland mixed forest especially in the Homochitto River basin, bottomland forest, and spring-seeps.

**Rumex crispus* L., A1179. Abundant. Old fields, cultivated fields, fencerows, and roadsides.

Rumex hastatulus Baldwin, A1877. Common. Old fields, roadsides, and yards.

**Rumex pulcher* L., A779. Infrequent. Old fields and cultivated fields.

PORTULACACEAE

Claytonia virginica L., A477. Rare. Edge of bottomland hardwood forest.

**Portulaca oleracea* L., EA 126. Infrequent. Sidewalk cracks in towns.

PRIMULACEAE

Anagallis minima (L.) E.H.L. Krause, A1870. Infrequent. Pine forest and roadsides.

Lysimachia lanceolata Walter, A844. Infrequent. Roadside ditches.

Samolus valerandi ssp. *parviflorus* (Raf.) Hultén [= *S. parviflorus* Raf.], A1946. Infrequent. Bottomland hardwood forest.

RANUNCULACEAE

**Clematis terniflora* DC., A1354. Infrequent. Fencerows, roadsides, and house sites.

Clematis virginiana L., A1696. Common. Forest edges.

Ranunculus abortivus L., A279. Infrequent. Moist open roadsides and yards.

Ranunculus fascicularis Muhl. ex Bigelow, A268. Infrequent. Pine forest, clearcuts, and roadsides.

**Ranunculus parviflorus* L., A540. Infrequent. Old fields.

Ranunculus pusillus Poir., A324. Common. Moist open areas.

Ranunculus recurvatus Poir., A652. Infrequent. Sandy and gravelly areas, especially near bottomland.

**Ranunculus sardous* Crantz, A222. Abundant. Pastures, old fields, yards, and roadsides.

RHAMNACEAE

Berchemia scandens (Hill) K. Koch, A558. Common. Forest of various sorts and forest edges.

Ceanothus americanus L., A659. Infrequent. Pine forest and associated roadsides.

Frangula caroliniana (Walter) A. Gray [= *Rhamnus caroliniana* Walter], A609. Infrequent. Mature

hardwood forest of ravines and Saffell outcrops.

ROSACEAE

Agrimonia microcarpa Wallr., A1555. Rare. Mature upland hardwood forest of Saffell outcrops.

Agrimonia rostellata Wallr., A1389. Rare. Mature upland hardwood forest of Saffell outcrops.

Amelanchier arborea (F. Michx.) Fernald, A203. Infrequent. Forest of various sorts.

Crataegus marshallii Eggl., EA 246. Common. Forest of various sorts.

Crataegus pulcherrima Ashe, WA&M 70982. Infrequent. Upland, unburned longleaf pine forest in the Homochitto River basin.

Crataegus spathulata Michx., A547. Rare. Upland unburned longleaf pine forest of the Homochitto River basin.

**Duchesnea indica* (Andrews) Focke, A206. Infrequent. Yards and ruderal areas.

Geum canadense Jacq., A1057. Rare. Sandy bottomland forest of the Homochitto River.

Malus angustifolia (Aiton) Michx., A432. Infrequent. Upland forest, especially in the Homochitto River basin.

Photinia pyrifolia (Lam.) K.R. Robertson & J.B. Phipps [= *Aronia arbutifolia* (L.) Pers.], A2024. Infrequent. Spring-seeps and swamp margins.

◆ **Photinia serratifolia* (Desf.) Kalkman, A386. Rare. Upland and bottomland mixed forest.

Potentilla simplex Michx., A503. Rare. Saffell outcrops.

Prunus angustifolia Marshall, EA 196. Common. Pine forest and dry roadsides.

Prunus caroliniana (Mill.) Aiton, EA 224. Infrequent. Saffell outcrops, upland mature hardwood forest, and bottomland hardwood forest.

Prunus mexicana S. Watson, A205. Common. Forest edges of various sorts and Saffell outcrops.

Prunus serotina Ehrh., A745. Abundant. Forest of various sorts and fencerows.

Prunus umbellata Elliott, A211. Infrequent. Upland and bottomland forest edges.

**Pyrus calleryana* Decne., A383. Rare. Old oil well site.

**Rosa bracteata* J.C. Wendl., A776. Rare. Roadside north of Liberty.

Rosa carolina L., A1944. Common. Upland pine forest and roadsides.

**Rosa laevigata* Michx., A406. Common. Fencerows, roadsides, and forest edges of various sorts.

**Rosa multiflora* Thunb. ex A. Murray, A543. Infrequent. Roadsides.

**Rosa wichuraiana* Crép., A797. Infrequent. Old pastures and fields, fencerows, and roadside ditches.

Rubus argutus Link, A438. Abundant. Pine forest, forest edges, and clearcuts.

Rubus flagellaris Willd. [including *R. enslenii* Tratt.], A2518. Infrequent. Pine forest and gravelly areas.

Rubus trivialis Michx., A218. Abundant. Old fields, pastures, and open forest of various sorts.

RUBIACEAE

Cephalanthus occidentalis L., A1098. Infrequent. Pond margins, riverbanks, and swamp margins.

Diodia teres Walter, A1282. Common. Clearcuts, ruderal areas, and pine forest.

Diodia virginiana L., A719. Infrequent. Clearcuts and disturbed areas.

Galium aparine L., A263. Infrequent. Ruderal areas and yards.

Galium circaezans Michx. Referenced in Jones (1976); specimen not seen.

Galium obtusum Bigelow ssp. *obtusum*, A479. Rare. Bottomlands.

Galium orizabense ssp. *laevicaule* (Weath. & S.F. Blake) Dempster, A1226. Common. Saffell outcrops, burned pine forest, and roadsides.

Galium pilosum var. *puncticulosum* (Michx.) Torr. & A. Gray, A1503. Rare. Pine forest.

Galium triflorum Michx., A848. Rare. Mature hardwood forest.

Galium uniflorum Michx., A1018. Rare. Pine forest.

Houstonia micrantha (Shinners) Terrell, A281. Infrequent. Yards, cemeteries, and fields.

Houstonia purpurea L. var. *purpurea*, A613. Infrequent. Forest drains.

Houstonia pusilla Schoepf, A209. Infrequent. Yards, cemeteries, and fields.

Houstonia rosea (Raf.) Terrell, A294. Infrequent. Yards, cemeteries, and fields.

Mitchella repens L., A545. Common. Forest of various sorts.

Oldenlandia boscii (DC.) Chapm., WA&M 71205. Infrequent. Sandy and gravelly openings.

Oldenlandia uniflora L., A2289. Infrequent. Bottomland fields.

**Richardia scabra* L., A2353. Infrequent. Sandy river banks.

**Sherardia arvensis* L., A656. Infrequent. Roadside ditches and yards.

RUTACEAE

**Poncirus trifoliata* (L.) Raf., A1209. Infrequent. Sandy margins of creeks and old home sites.

Ptelea trifoliata var. *mollis* Torr. & A. Gray, A1201. Rare. Upland hardwood forest in the western part of the county.

Zanthoxylum clava-herculis L., A1200. Infrequent. Upland forest or sandy bottomland forest.

SALICACEAE

**Populus alba* L., A1176. Rare. Old home sites in the eastern half of the county.

Populus deltoides Bartram ex Marshall, A1225. Infrequent. Forest edges or bottomland openings.

Salix nigra Marshall, A575. Common. Riverbanks, pond margins, and moist roadsides.

SAPOTACEAE

Sideroxylon lycioides L. [= *Bumelia lycioides* (L.) Pers.], A2576. Rare. Upland hardwood forest in the Homochitto River basin.

SAURURACEAE

Saururus cernuus L., A737. Locally common. Roadside ditches, open swamps, spring-seeps, and beaver-impounded ponds.

SCHISANDRACEAE

Schisandra glabra (Brickell) Rehder, A994. Infrequent. Hardwood ravines and Saffell outcrops.

SCROPHULARIACEAE

Agalinis fasciculata (Elliott) Raf., A1553. Abundant. Old fields.

Agalinis plukenetii (Elliott) Raf., A1764. Infrequent. Longleaf pine forest of the Homochitto River basin.

Agalinis tenuifolia (Vahl) Raf., A2254. Rare. Rocky bluffs overlooking the East Fork Amite River.

‡*Aureolaria dispersa* (Small) Pennell [= *A. virginica* (L.) Pennell, in part], A1632. Infrequent. Pine forest in the southeastern part of the county. Species taxonomy follows Pennell (1935).

Aureolaria pectinata (Nutt.) Pennell, EA 96. Infrequent. Pine forest.

Buchnera americana L. [including *B. floridana* Gandoger], A588. Common. Fields.

Gratiola floridana Nutt., A216. Locally common. Spring-seeps and swamp margins.

Gratiola neglecta Torr., A517. Rare. Bottomland roadside in the southeastern part of the county.

Gratiola pilosa Michx., WA&M 71195. Infrequent. Pine forest and roadsides.

Gratiola virginiana L., A532. Infrequent. Bottomland forest and river margins.

**Lindernia crustacea* (L.) F. Muell., A1355. Infrequent. Yards.

Lindernia dubia (L.) Pennell, A1045. Common. Bottomland openings and river margins.

**Mazus pumilus* (Burm.f.) Steenis, EA 227. Infrequent. Bottomland fields and yards.

Mecardonia acuminata (Walter) Small, A1502. Infrequent. Pine forest.

Micranthemum umbrosum (Walter ex J.F. Gmel.) S.F. Blake, A763. Locally common. Pond margins, wet ditches, swamps, and bottomland hardwood forest.

Mimulus alatus Aiton, A1330. Swamp margins, river margins, and edges of bottomland hardwood forest.

Nuttallanthus canadensis (L.) D.A. Sutton [= *Linaria canadensis* (L.) Chaz.], A269. Common. Pastures, roadsides, and yards.

Pedicularis canadensis L., A643. Rare. Upland forest of the Homochitto River basin.

Penstemon digitalis Nutt. ex Sims, A843. Infrequent. Pine forest and roadsides.

Penstemon laxiflorus Pennell, A1883. Infrequent. Roadside banks.

Scoparia dulcis L., A2290. Rare. Gravelly clearcuts.

Seymeria cassioides (Walter ex J.F. Gmel.) S.F. Blake, A1743. Common. Pine forest.

**Verbascum thapsus* L., A1132. Infrequent. Saffell outcrops, gravelly areas, and roadsides.

**Veronica arvensis* L., A286. Common. Roadsides and yards.

Veronica peregrina L., A1882. Common. Roadsides and clearcuts.

**Veronica persica* Poir., A295. Common. Roadsides.

SIMAROUBACEAE

**Ailanthus altissima* (Mill.) Swingle, A2109. Infre-

quent. Ditches and roadsides in the western part of the county.

SOLANACEAE

Physalis angulata L., A1237. Common. Cultivated fields.

Physalis carpenteri Riddell, A1051. Infrequent. Saffell outcrops.

Physalis heterophylla Nees, A700. Infrequent. Saffell outcrops and sandy bottomland.

Physalis pubescens L., A1240. Common. Clearcuts and roadsides.

Solanum elaeagnifolium Cav., M. Whitson 1142 (DUKE!). Rare. Gravelly upland in the Homochitto River basin.

Solanum carolinense L., A666. Common. Roadsides, cultivated fields, and pine forest.

**Solanum pseudocapsicum* L., A2346. Infrequent. Sandy bottomland forest along the forks of the Amite River.

Solanum ptychanthum Dunal, A720. Common. Clearcuts, open fields, and sandy roadsides.

**Solanum viarum* Dunal, A1025. Rare. Cattle barns. Noxious weed; all individuals observed were collected or destroyed.

STERCULIACEAE

Melochia corchorifolia L., A1795. Rare. Riverbanks and sandbars of the Amite River basin.

STYRACACEAE

Halesia diptera J. Ellis, A430. Abundant. Bottomland forest, swamp margins, ravines, and Saffell outcrops.

Styrax grandifolius Aiton, A1100. Infrequent. Bottomland hardwood forest, ravines, and Saffell outcrops.

SYMPLOCACEAE

Symplocos tinctoria (L.) L'Hér., A402. Common. Bottomland hardwood forest, upland hardwood or mixed forest, and ravines.

THEACEAE

Stewartia malacodendron L., A559. Infrequent. Bottomland hardwood forest, hardwood ravines, and Saffell outcrops.

TILIACEAE

Tilia americana var. *caroliniana* (Mill.) Castigl., A2075. Infrequent. Hardwood forest of Saffell outcrops.

ULMACEAE

Celtis laevigata Willd., A1061. Infrequent. Sandy bottomland of the Homochitto River basin.

Ulmus alata Michx., A935. Abundant. Upland hardwood forest, pine forest, and bottomland hardwood forest.

Ulmus americana L., EA 200. Infrequent. River margins and bottomland forest.

Ulmus rubra Muhl., A870. Rare. Bottomland hardwood forest.

UMBELLIFERAE

Chaerophyllum tainturieri Hook., A332. Common. Roadsides and fields.

Ciclospermum leptophyllum (Pers.) Sprague ex Britton & Wilson [= *Apium leptophyllum* (Pers.) Benth.], A636. Infrequent. Roadsides, upland forest over loose soil, and Saffell outcrops.

Cicuta maculata L., A807. Infrequent. Moist roadsides and open bottomland.

**Daucus carota* L., EA 262. Infrequent. Roadsides.

Eryngium prostratum Nutt. ex DC., A829. Abundant. Moist fields, roadside ditches, and open bottomland.

Eryngium yuccifolium Michx., WA&M 71053. Infrequent. Upland pine forest and sandy river margins.

Hydrocotyle ranunculoides L.f., A1837. Rare. Muddy swamp edge in the West Fork Amite River drainage.

Hydrocotyle umbellata L., A2059. Common. Pond margins, swamp margins, sloughs, and wet ditches.

Hydrocotyle verticillata Thunb., A1949. Infrequent. Bottomland hardwood forest.

Ptilimnium capillaceum (Michx.) Raf., A757. Common. Roadside ditches and bottomland fields.

Sanicula canadensis L. var. *canadensis*, A859. Common. Mixed forest and dry, upland hardwood forest.

Sanicula smallii E.P. Bicknell, A615. Infrequent. Mesic hardwood ravines and Saffell outcrops.

Thaspium trifoliatum (L.) A. Gray, A351. Infrequent. Bottomland hardwood forest and hardwood ravines.

URTICACEAE

Boehmeria cylindrica (L.) Swartz, A1350. Common. Bottomland forest or other mesic forest.

Laportea canadensis (L.) Wedd., A2112. Infrequent. Hardwood forest of the Homochitto River basin.

Pilea pumila (L.) A. Gray, A1823. Rare. Abandoned oxbow swales.

Urtica chamaedryoides Pursh, A2118. Infrequent. Hardwood forest on thick loess in the Homochitto River basin and disturbed forest in the northeastern corner of the county.

VALERIANACEAE

Valerianella radiata (L.) Dufur., A272. Common. Roadsides, yards, and fields.

VERBENACEAE

Callicarpa americana L., A1029. Abundant. Pine forest, mixed forest, and Saffell outcrops.

**Clerodendrum indicum* (L.) Kuntze, A2282. Rare. Roadsides.

Glandularia pulchella (Sweet) Tronc. Referenced in Pullen et al. (1968); specimen not seen.

**Lantana camara* L., A2306. Rare. Roadsides.

Phryma leptostachya L., A1143. Infrequent. Rich hardwood forest at Saffell outcrops.

**Verbena brasiliensis* Vell., A724. Abundant. Roadsides, upland forest edges, and old fields.

Verbena halei Small, A470. Infrequent. Roadsides.

**Verbena rigida* Spreng., A597. Locally common. Roadsides.

**Vitex agnus-castus* L., A996. Rare. Ruderal lot in Liberty.

VIOLACEAE

Viola affinis Leconte, A247. Common. Ravines, upland hardwood and mixed forest, and Saffell outcrops.

Viola bicolor Pursh [= *V. rafinesquii* Greene], A328. Infrequent. Yards and old fields.

Viola missouriensis Greene (sensu lato, including *V. floridana* Brainerd and possibly *V. langloisii* Greene; see Gilad 1995), A291. Infrequent. Old fields and yards.

Viola pedata L., A334. Locally common. Pine forest and roadsides in the eastern half of the county.

Viola primulifolia L., A217. Abundant. Moist openings, streambanks, bottomland fields, and roadside ditches.

Viola triloba Schwein., A708. Common. Forest of various sorts and Saffell outcrops.

Viola walteri House, A260. Common. Upland hardwood forest, ravines, and Saffell outcrops.

VISCACEAE

Phoradendron leucarpum (Raf.) Reveal & M.C. Johnst., A1534. Common. Parasitic and epiphytic upon various hardwoods, primarily *Prunus serotina* and *Quercus* spp.

VITACEAE

Ampelopsis arborea (L.) Koehne, A1305. Common. Open forest or forest edges of various sorts.

Parthenocissus quinquefolia (L.) Planch., A1155. Abundant. Pine forest, upland hardwood or mixed forest, bottomland hardwood forest, Saffell outcrops, swamps, yards, and towns.

Vitis aestivalis Michx. var. *aestivalis*, A2081. Abundant. Forest and forest edges of various sorts.

Vitis cinerea (Engelm.) Engelm. ex Millardet var. *cinerea*, A888. Common. Forest and forest edges of various sorts.

Vitis rotundifolia Michx., A695. Abundant. Forest and forest edges of various sorts.

DISCUSSION

The survey for vascular plants in Amite County, Mississippi yielded 923 species, which is about 31% of the total number of species found in Mississippi (Kartesz 1999). Table 3 provides a summary of the taxa found in the county. The largest plant families are Compositae (116 spp.), Gramineae (99 spp.), Cyperaceae (74 spp.), and Leguminosae (63 spp.), and the three largest genera are *Carex* (34 spp.), *Panicum* s.l. (19 spp.), and *Quercus* (18 spp. + 1 common hybrid). Introduced species make up about 16% of the flora, which is a proportion similar to neighboring areas (e.g., Clewell 1985: 16%).

The survey re-confirmed the existence of several rare species in the county

TABLE 3. Synopsis of vascular plant taxa recorded for Amite County, Mississippi.

	Species	Genera	Families
Lycopodiophyta	1	1	1
Polypodiophyta	26	20	11
Coniferophyta	7	3	2
Magnoliophyta	889	442	139
(Magnoliopsida)	634	343	109)
(Liliopsida)	255	99	30)
TOTAL	923	466	153
Indigenous	777	389	142
Introduced	146 (16%)	77	11

Largest families: Compositae (116 spp.), Gramineae (99 spp.), Cyperaceae (74 spp.), Leguminosae (63 spp.)

Largest genera: *Carex* (34 spp.), *Panicum* s.l. (19 spp.), and *Quercus* (18 spp.)

and added a few new records to the state. Rarity is measured in accordance with the Mississippi Natural Heritage Program (1994), where “G” and a number indicate worldwide status and “S” and a number indicate state status. The rarest species are given a number 1, and the more secure given 5. Rare species indicated by the Mississippi Natural Heritage Program (1995) to occur in Amite County that were again encountered in the present survey include *Antennaria solitaria* (G5/S3?), *Chromolaena ivifolium* (G5/S2?), *Epidendrum conopseum* (G3G4/S2), *Luzula acuminata* (G5/S3), *Mikania cordifolia* (G5/S3S4), *Pachysandra procumbens* (G4G5/S3), *Schisandra glabra* (G4/S3?), *Stewartia malacodendron* (G4/S3S4), *Trichomanes petersii* (G3/S1), and *Trillium foetidissimum* (G3G4/S3). *Stewartia malacodendron* and *Trillium foetidissimum*, although listed as state rare species, are actually not uncommon in the county.

In addition to previous records, the present survey recorded the existence of *Carex decomposita* (G3G4/S3?), *Dryopteris ludoviciana* (G4/S1), *Iris brevicaulis* (G4/S?), *Lobelia appendiculata* (G4G5/S2S3), *Matelea carolinensis* (G4/S2S3), *Melanthium virginicum* (G5/S2S3), *Sabatia campestris* (G5?/S2S3), and *Spiranthes ovalis* (G5/S2S3).

New records for the state are *Alstroemeria psitticina* (Alstroemeriaceae), *Clinopodium gracile* (Labiatae), *Ipomoea indica* (Convolvulaceae), *Photinia serratifolia* (Rosaceae), and *Solidago auriculata* (Compositae). *Alstroemeria psitticina* is an introduced species from Brazil (Bailey 1949). One small population was discovered within the city limits of Liberty under a tree with much leaf mulch. Neither the property owner nor his neighbors recognized the species, and none claimed to have cultivated such a species in the past. *Clinopodium gracile* is an introduced species from Japan (Burkhalter 1984). It was first noted

to occur in the United States in Louisiana in 1963 (Thieret 1964) and has subsequently been collected in Florida (Burkhalter 1984) and reported for Alabama (J.V. Ward, pers. comm. to Kartesz 1999). *C. gracile* was actually discovered in the United States as early as 1934 but apparently was never reported (Roland Harper, s.n., Iberia Parish, LA, 16 July 1934, BHI). It has also been known to occur in Mississippi (John R. MacDonald 9771, Copiah Co., MS, 19 July 1996, MO!) but has not been previously reported. *Ipomoea indica* is a pantropical weed and was found in several roadside ditches near Liberty. *Photinia serratifolia* is a shrubby species native to China (Bailey 1949) and has been frequently cultivated in the southern United States. Although I found no clear evidence of self-established lines, the species was found in areas with no evidence suggesting former cultivation either. *Solidago auriculata* is the only new record of a species native to the southeastern United States. It has a large distribution but seldom occurs with frequency.

Also collected were *Physalis carpenteri* and *Dryopteris ludoviciana*, both of which have only recently been reported to occur in Mississippi (L.M. McCook, pers. comm. to Kartesz 1999, Sorrie & Leonard 1999, respectively). At least one specimen of *Physalis carpenteri* had been collected in Mississippi before (Warren County, MISS!), was misidentified, and was later annotated correctly by Janet Sullivan, then working on her part of the *Flora of the Southeastern United States*. Unfortunately, that treatment was not subsequently published. Considering the limited range of *Physalis carpenteri* to Florida, Louisiana, and Mississippi, it will likely be added to the Mississippi Natural Heritage Program list of rare species.

The flora also yielded a number of champion trees and shrubs. Especially large trees and shrubs were noted and contributed to the Mississippi Forestry Commission champion tree program. Amite County was already known to be home to the largest individuals of *Frangula (Rhamnus) caroliniana*, *Hamamelis virginiana*, *Liriodendron tulipifera*, *Magnolia acuminata*, *Nyssa sylvatica*, *Pyrus communis*, and *Triadica (Sapium) sebifera* in Mississippi and is now known to be home to the largest *Halesia diptera*, *Ilex verticillata*, *Ilex vomitoria*, *Kalmia latifolia*, and *Morella cerifera*.

The flora of Amite County reveals the complexity of plant distributions in the southeastern United States. The flora is rich in species and vegetation types, with prominent variations resulting from physiographic, topographic, and edaphic factors. The eastern half of the county shows floristic similarity to other upland regions of the lower coastal plain. Pines are the dominant woody plants, surrounded by a herbaceous vegetation rich in composites, legumes, grasses, and sedges. Surprisingly, there is more similarity between the highlands of the Homochitto River basin and the southeastern corner of the county than with the area in between (see Fig. 2). Perhaps this is a result of the erosion of loess from Homochitto ridges and the exposure of the underlying Miocene clays. In

these Homochitto areas, many coastal plain species are found which are not even found in the southeastern corner of the county, for example, *Drosera brevifolia*, *Ionactis linariifolius*, *Liatris elegans*, and *Symphyotrichum adnatus*.

With the introduction of loess to the substrate and the large Mississippi Embayment just to the west, Amite County naturally serves as the westernmost distribution point for several coastal plain species, such as *Gelsemium rankinii* and *Illicium floridanum*. This is almost true for *Packera anonyma*, *Gaylussacia dumosa*, and *Kalmia latifolia* as well, but there are rare reports of their occurrence west of the Mississippi River (MacRoberts 1989). The introduction of loess also serves to harbor the residual flora of Pleistocene migrations from the north (Delcourt & Delcourt 1975), and thus, Amite County is home to several species indicative of the mesophytic forests of mid-eastern North America, including *Adiantum pedatum*, *Cynoglossum virginianum*, *Hydrangea arborescens*, and *Pachysandra procumbens*. There is also a weaker botanical association with the West (e.g., *Cuscuta cuspidata*, *Gaura brachycarpa*, *Liatris pycnostachya*, *Sabatia campestris*, and *Vernonia texana*) and with the neotropics (e.g., *Chromolaena ivifolia* and *Mikania cordifolia*). Other phytogeographical conclusions have been discussed in greater detail in Allen et al. (1975).

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REFERENCES

- ALFORD, M.H. 1998. New records of *Allocapnia* (Plecoptera: Capniidae) from Mississippi and Louisiana, with accompanying scanning electron micrographs. *Entomol. News* 109: 183–188.
- ALLEN, C.M. 1972. A flora of the vascular plants of St. Helena Parish, Louisiana. M.S. Thesis, Louisiana State University.
- ALLEN, C.M. 1992. Grasses of Louisiana, 2nd ed. Cajun Prairie Habitat Preservation Society, Eunice, LA.
- ALLEN, C.M., M.G. CURRY, and B.F. MARTIN. 1975. A vascular flora of St. Helena and West Feliciana Parishes, Louisiana. *Univ. of Southw. Louisiana Res. Ser. No.* 39.
- BACKLUND, M., B. OXELMAN, and B. BREMER. 2000. Phylogenetic relationships within the Gentianales based on *ndhF* and *rbcl* sequences, with particular reference to the Loganiaceae. *Amer. J. Bot.* 87:1029–1043.
- BAILEY, L.H. 1949. *Manual of cultivated plants*. MacMillan, New York.
- BICKER, A.R., Jr., compiler. 1969. *Geologic map of Mississippi*.
- BLAISDELL, R.S., J. WOOTEN, and R.K. GODFREY. 1974. The role of magnolia and beech in forest processes in the Tallahassee, Florida, Thomasville, Georgia area. *Proc. Annual Tall Timbers Fire Ecol. Conf.* 13:363–397.
- BOURDO, E.A., JR. 1956. A review of the general land office survey and of its use in quantitative studies of former forests. *Ecology* 37:754–768.
- BRAUN, E.L. 1950. *Deciduous forest of eastern North America*. Free Press, New York.
- BRUMMITT, R.K. and C.E. POWELL, eds. 1992. *Authors of plant names*. Royal Bot. Gardens, Kew.
- BRYSON, C.T. and R. CARTER. 1992. Notes on *Cyperus* and *Kyllinga* (Cyperaceae) in Mississippi with records of six species new to the state. *Sida* 15:119–124.
- BRYSON, C.T., J.R. MACDONALD, R. CARTER, and S.D. JONES. 1996. Noteworthy *Carex*, *Cyperus*, *Eleocharis*, *Kyllinga*, and *Oxycaryum* (Cyperaceae) from Alabama, Arkansas, Georgia, Louisiana, Mississippi, North Carolina, Tennessee, and Texas. *Sida* 17:501–518.
- BURKHALTER, J.R. 1984. Additions to the vascular flora of Florida. *Castanea* 49:180–186.
- CAMPBELL, C.S. 1983. Systematics of the *Andropogon virginicus* complex (Gramineae). *J. Arnold Arbor.* 64:171–254.
- CAPLENOR, D. 1968. Forest composition on loessal and non-loessal soils in west-central Mississippi. *Ecology* 49:322–331.

- CASEY, A.E. 1957. Amite County, Mississippi, 1699–1890. Vol. III. The environs. Privately published by the Amite County Historical Fund, Birmingham.
- CASEY, A.E. and F.P. OTKEN. 1948. Amite County, Mississippi, 1699–1865. Vol. I. Birmingham: Privately published by the Amite County Historical Fund.
- CASEY, A.E., F.P. OTKEN, M.T. LOCH, and C.G. NORTH. 1950. Amite County, Mississippi, 1699–1865. Vol. II. The churches. Privately published by the Amite County Historical Fund, Birmingham.
- CHAPMAN, A.W. 1897. Flora of the southern United States. 3rd ed. Cambridge Botanical Supply Co., Cambridge, MA.
- CHRISTENSEN, N.L. 2000. Vegetation of the southeastern coastal plain. In: M.G. Barbour and W.D. Billings, eds. North American terrestrial vegetation, 2nd ed. Cambridge Univ. Press, Cambridge, U.K. Pp. 397–448.
- CLARK, E. 1997. Mississippi official and statistical register 1996–2000. Jackson, MS.
- CLEWELL, A.F. 1985. Guide to the vascular plants of the Florida panhandle. Tallahassee: Florida State UP.
- CORRELL, D.S. and M.C. JOHNSTON. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner.
- CRONQUIST, A. 1980. Asteraceae. Vascular flora of the southeastern United States. Vol. I. Univ. of North Carolina Press, Chapel Hill.
- DAHLGREN, R.M.T., H.T. CLIFFORD, and P.F. YEO. 1985. The families of the monocotyledons: structure, evolution, and taxonomy. Springer-Verlag, Berlin.
- DARBY, W. 1817. A geographical description of the state of Louisiana, the southern part of the state of Mississippi, and territory of Alabama James Olmstead, New York.
- DARBY, W. and T. DWIGHT, JR. 1836. A new gazetteer of the United States of America Rev. ed. Edward Hopkins, Hartford.
- DELCOURT, H.R. and P.A. DELCOURT. 1974. Primeval magnolia-holly-beech climax in Louisiana. Ecology 55:638–644.
- DELCOURT, H.R. and P.A. DELCOURT. 1975. The blufflands: Pleistocene pathway in the Tunica Hills. Amer. Midl. Naturalist 94:385–400.
- DELCOURT, H.R. and P.A. DELCOURT. 1977. Presettlement magnolia-beech climax of the Gulf coastal plain: quantitative evidence from the Apalachicola River Bluffs, north central Florida. Ecology 58:1085–1093.
- DELCOURT, H.R. and P.A. DELCOURT. 2000. Eastern deciduous forests. In: M.G. Barbour and W.D. Billings, eds. North American terrestrial vegetation, 2nd ed. Cambridge Univ. Press, Cambridge, U.K. Pp. 357–395.
- DOERING, J.A. 1935. Post-Fleming surface formations of coastal southeast Texas and south Louisiana. Bull. Amer. Assoc. Petrol. Geol. 19:651–688.
- DOERING, J.A. 1956. Review of Quaternary surface formations of Gulf Coast region. Bull. Amer. Assoc. Petrol. Geol. 40:1816–1862.
- DONOGHUE, M.J. 1983. The phylogenetic relationships of *Viburnum*. In: N.I. Platnick and V.A. Funk, eds. Advances in cladistics, vol. 2. Columbia Univ. Press, New York. Pp. 143–166.
- DONOGHUE, M.J., R.G. OLMSTEAD, J.F. SMITH, and J.D. PALMER. 1992. Phylogenetic relationships of Dipsacales based on rbcL sequences. Ann. Missouri Bot. Gard. 79:333–345.

- DUNCAN, W.H. 1953. Taxonomic collections of vascular plants in the southeastern United States—their abundance and relation to production of floras. *Rhodora* 55:353–358.
- EVANS, A.M. 1978. Mississippi flora: a guide to the ferns and fern allies. *Sida* 7:282–297.
- FENNEMAN, N.M. 1938. Physiography of eastern United States. McGraw-Hill, New York.
- FLORA OF NORTH AMERICA EDITORIAL COMMITTEE, eds. 1997. Flora of North America north of Mexico. Volume III. Magnoliophyta: Magnoliidae and Hamamelidae. Oxford Univ. Press, New York.
- GANDHI, K.N. and R.D. THOMAS. 1989. Asteraceae of Louisiana. *Sida, Bot. Misc.* 4:1–202.
- GIL-AD, N.L. 1995. Systematics of *Viola* subsection Boreali-Americanae. *Boissiera* 53:5–130.
- GILLIS, N.E. 1963. Early inhabitants of the Natchez District. Gillis, Baton Rouge, LA.
- GLEASON, H.A. 1931. Book review: Johnson's taxonomy of flowering plants. *Torreyia* 31:77–84.
- GODFREY, R.K. 1988. Trees, shrubs, and woody vines of northern Florida and adjacent Georgia and Alabama. Univ. of Georgia Press, Athens.
- GODFREY, R.K. and J.W. WOOTEN. 1979. Aquatic and wetland plants of southeastern United States. Monocotyledons. Univ. of Georgia Press, Athens.
- GODFREY, R.K. and J.W. WOOTEN. 1981. Aquatic and wetland plants of southeastern United States. Dicotyledons. Univ. of Georgia Press, Athens.
- HARPER, F., ed. 1958. The travels of William Bartram: naturalist's edition. Yale Univ. Press, New Haven, CT.
- HASKINS, M.L. and W.J. HAYDEN. 1987. Anatomy and affinities of *Penthorum*. *Amer. J. Bot.* 74: 164–177.
- HODGKINS, E.J. 1958. Effects of fire on undergrowth vegetation in upland southern pine forests. *Ecology* 58:36–46.
- HOLMES, J.S. and J.H. FOSTER. 1908. A study of forest conditions of southwestern Mississippi. Mississippi State Geol. Surv. Bull. No. 5.
- HOLMGREN, P.K., N.H. HOLMGREN, and L.C. BARNERTT, eds. 1990. Index herbariorum Part 1: the herbaria of the world, 8th ed. New York Botanical Garden, Bronx.
- JOHNSON, G.P. 1988. Revision of *Castanea* sect. *Balanocastanon* (Fagaceae). *J. Arnold Arbor.* 69:25–49.
- JONES, S.B., Jr. 1974a. Mississippi flora. I. Monocotyledon families with aquatic or wetland species. *Gulf Res. Rep.* 4:357–379.
- JONES, S.B., Jr. 1974b. Mississippi flora. II. Distribution and identification of the Onagraceae. *Castanea* 39:370–379.
- JONES, S.B., Jr. 1975. Mississippi flora. III. Distribution and identification of the Brassicaceae. *Castanea* 40:238–252.
- JONES, S.B., Jr. 1976. Mississippi flora. VI. Miscellaneous families. *Castanea* 41:189–212.
- KARTESZ, J.T. 1999. A synonymized checklist and atlas with biological attributes for the vascular flora of the United States, Canada, and Greenland. 1st ed. in Kartesz, J.T., and C.A. Meacham. Synthesis of the North American flora, Version 1.0. North Carolina Botanical Garden, Chapel Hill.
- KRINITZSKY, E.L. and W.J. TURNBULL. 1967. Loess deposits of Mississippi. *Special Pap. Geol. Soc. Amer.* 94.

- KURZ, H. 1944. Secondary forest succession in the Tallahassee Red Hills. *Proc. Florida Acad. Sci.* 7:59–100.
- LEGGETT, A.R., A.C. MILBRANDT, L.B. HALE, and P.J. BARLOW. 1968. Soil survey of Walthall County, Mississippi. USDA, Washington, D.C.
- LELONG, M.G. 1986. A taxonomic treatment of the genus *Panicum* (Poaceae) in Mississippi. *Phytologia* 61:251–269.
- LINNAEUS, C. 1758. *Opera varia*. Lucca.
- LOWE, E.N. 1913. Forest conditions of Mississippi. Mississippi State Geol. Surv. Bull. No. 11 (a reprint with additions of Bulletins Nos. 5 and 7).
- LOWE, E.N. 1921. Plants of Mississippi: A list of flowering plants and ferns. Mississippi State Geological Survey Bulletin No. 17. Hederman Brothers, Jackson, MS.
- MACROBERTS, D.T. 1989. A documented checklist and atlas of the vascular flora of Louisiana. *Bull. Mus. Life Sci. Louisiana State Univ.* 7–9.
- MCATEE, W.L. 1956. A review of the Nearctic *Viburnum*. Published by the author, Chapel Hill, NC.
- MCCOOK, L.M. 1982. The vascular flora of the Clark Creek Natural Area, Wilkinson County, Mississippi. M.S. Thesis, University of New Orleans.
- MILBRANDT, A.C. 1976. Soil survey of Amite County, Mississippi. USDA, Washington, D.C.
- MILBRANDT, A.C. and L.B. HALE. 1968. Soil survey of Pike County, Mississippi. USDA, Washington, D.C.
- MISSISSIPPI FORESTRY COMMISSION. 1998. Facts at a glance: July 1997–June 1998. MFC Publication #3.
- MISSISSIPPI NATURAL HERITAGE PROGRAM. 1994. Special plant list. Museum of Natural Science, Mississippi Department of Wildlife, Fisheries, & Parks, Jackson.
- MISSISSIPPI NATURAL HERITAGE PROGRAM. 1995. Special plants & animals: by county. Museum of Natural Science, Mississippi Department of Wildlife, Fisheries, & Parks, Jackson.
- MONK, C.D. 1965. Southern mixed hardwood forest of north central Florida. *Ecol. Monogr.* 35:335–354.
- MONK, C.D. 1968. Successional and environmental relationships of the forest vegetation of north central Florida. *Amer. Midl. Naturalist* 79:441–457.
- NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA). 1962–1997. Annual climatological summary, Liberty 5 W station (22075070). National Climatic Data Center, Asheville, NC.
- NESOM, G.L. and M. TREIBER. 1977. Beech-mixed hardwoods communities: A topo-edaphic climax on the North Carolina coastal plain. *Castanea* 42:119–140.
- PATTISON, W.D. 1957. Beginnings of the American rectangular land survey system, 1784–1800. Univ. of Chicago Press, Chicago, IL.
- PENNELL, F.W. 1935. The Scrophulariaceae of eastern temperate North America. *Acad. Nat. Sci. Philadelphia Monogr.* 1:1–650.
- PESSIN, L.J. 1933. Forest associations on the uplands of the lower Gulf coastal plain (longleaf pine belt). *Ecology* 14:1–13.
- PULLEN, T.M. 1966. A preliminary check-list of the Orchidaceae of Mississippi. *Castanea* 31:153–154.
- PULLEN, T.M., S.B. JONES, JR., and J.R. WATSON, JR. 1968. Additions to the flora of Mississippi. *Castanea* 33:326–334.

- QUARTERMAN, E. and C. KEEVER. 1962. Southern mixed hardwood forest: climax in the southeastern coastal plain, U.S.A. *Ecol. Monogr.* 32:167–185.
- RADFORD, A.E., H.E. AHLES, and C.R. BELL. 1968. *Manual of the vascular flora of the Carolinas*. Univ. of North Carolina Press, Chapel Hill.
- SHINNERS, L.H. 1962. Annual *Sisyrinchiums* (Iridaceae) in the United States. *Sida* 1:32–42.
- SMALL, J.K. 1933. *Manual of the southeastern flora*. Science Press Printing Co., New York.
- SOLTIS, D.E. and P.S. SOLTIS. 1997. Phylogenetic relationships in Saxifragaceae sensu lato: a comparison of topologies based on 18S rDNA and rbcL sequences. *Amer. J. Bot.* 84:504–522.
- SORRIE, B.A. and S.W. LEONARD. 1999. Noteworthy records of Mississippi vascular plants. *Sida* 18:889–908.
- SPEARING, D. 1995. *Roadside geology of Louisiana*. Mountain Press, Missoula, MT.
- STERN, E. 1976. The freshwater mussels (Unionidae) of the Lake Maurepas–Pontchartrain–Borgne drainage system, Louisiana and Mississippi. Ph.D. dissertation, Louisiana State University.
- STEYERMARK, J.A. 1963. *Flora of Missouri*. Iowa State Univ. Press, Ames.
- STONE, D. 1997. *Carya*. In: *Flora of North America* Editorial Committee, eds. *Flora of North America north of Mexico*. Volume III. Magnoliophyta: Magnoliidae and Hamamelidae. Oxford Univ. Press, New York. Pp. 417–425.
- STRONG, M. and R. KRAL. 1999. (1413) Proposal to conserve the name *Scirpus miliaceus* (Cyperaceae) with a conserved type. *Taxon* 48:387–389.
- STRUWE, L., V.A. ALBERT, and B. BREMER. 1994. Cladistics and family level classification of the Gentianales. *Cladistics* 10:175–206.
- TEMPLE, L.C. and T.M. PULLEN. 1968. A preliminary checklist of the Compositae of Mississippi. *Castanea* 32:106–115.
- THIERET, J.W. 1964. *Lysimachia japonica* (Primulaceae) and *Clinopodium gracile* (Labiatae) in Louisiana: new to the United States. *Sida* 1:249–250.
- THWAITES, R.G. 1904. *Early western travels 1748–1846*. Vol. IV: Cuming's tour to the western country (1807–1809). A.H. Clark Company, Cleveland, OH.
- TRELEASE, W. 1902. *The Yuccae*. Thirteenth Annual Report of the Missouri Botanical Garden, St. Louis.
- UNITED STATES CENSUS BUREAU. 1820. Amite County, Mississippi, 1820 in United States historical census data browser [computer file, 1992]. Univ. of Virginia Press, Charlottesville.
- UNITED STATES CENSUS BUREAU. 1840. Amite County, Mississippi, 1840 in United States historical census data browser [computer file, 1992]. Univ. of Virginia Press, Charlottesville.
- UNITED STATES FOREST SERVICE. 1995. *Ecological units of the eastern United States: first approximation*. USFS, Atlanta.
- WEAKLEY, A.S. [in prep.] *Flora of the Carolinas and Virginia*. The Nature Conservancy.
- WELLS, B.W. 1942. Ecological problems of the southeastern United States coastal plain. *Bot. Rev. (Lancaster)* 8:533–561.
- ZULOAGA, F., J. DUBCOVSKY, and O. MORRONE. 1993. Infrageneric phenetic relations in New World *Panicum* (Poaceae: Panicoideae: Paniceae): a numerical analysis. *Canad. J. Bot.* 71: 1312–1327.